



# QDMA's ***Whitetail***Report 2012

*An annual report on the status of white-tailed deer,  
the foundation of the hunting industry in North America.*

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## The QDMA Mission:

*QDMA is dedicated to ensuring the future of white-tailed deer, wildlife habitat and our hunting heritage.*

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## INTRODUCTION

White-tailed deer are the most important game species in North America. More hunters pursue whitetails than any other species, and whitetail hunters contribute more financially than any other type of hunter. Collectively speaking, whitetails are the foundation of the entire hunting industry.

But how are whitetails doing in your state, province or region? How did your last hunting season compare to previous years or to your neighbor's? Read Part 1 to learn about state/provincial deer harvests during the past three seasons, including the buck harvest by age class and other insights. Find which states are shooting the most bucks and does, and see that the percentage of 1½-year-old bucks in the harvest is currently at the lowest national percentage ever reported!

In Part 2 learn about recent trends and the most pressing issues facing whitetails. View current antler restriction and crossbow regulation maps, and compare state/provincial fawn recruitment rates and coyote hunting seasons. See the

trends in increasing female participation in hunting and increasing hunting license sales. Learn how record grain prices and increased agricultural crop planting in 2011 likely impacted white-tailed deer and your hunting opportunities.

Part 3 is an informative reference section that includes information on regionally important forages for deer, how to determine the proper number of deer to harvest annually, how long whitetails live, what QDM really is, and more.

Part 4 provides an overview of QDMA's REACH program and includes information on our exciting new Youth and Land Certification Programs. It also includes valuable directories for QDMA Branches and state/provincial deer project leaders.

Prior Whitetail Reports have been quoted, cited, and used as research and reference material by numerous publications, communicators, and deer managers. Due to the response, QDMA enjoys producing this annual report, and we hope you find it helpful and informative.

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## INFORMATION & ASSISTANCE

Members of the media who have questions about the *Whitetail Report*, need additional information, or need sources for stories on whitetail biology or management, can contact QDMA's Education & Outreach staff at any time using the information below, or contact the National Office at (800) 209-3337.



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## ABOUT THE DEER HARVEST DATA IN THIS REPORT

The 2011-12 deer season is closed or nearing so for states/provinces across the whitetail's range, and biologists will be crunching data in the coming months to assess the outcome of this past season. For the 2012 Whitetail Report, QDMA compared harvest data from the three most recent seasons available: 2008-09, 2009-10, and 2010-11. Of the 37 states in the Midwest, Northeast and Southeast (see the map below) that comprise the

majority of whitetail habitat in the U.S., we acquired data from 36 for 2010-11. We also acquired data from five western states and six Canadian provinces. The data on the next eight pages are from each state and/or provincial wildlife agency. Agencies use different techniques to collect this data, and some collect more data than others. Analyses among agencies may not always compare "apples to apples," but each state/province provided their best possible data.

Also, analyses across years should provide valid comparisons for individual agencies. An important note about the "per square mile" figures presented in the following pages is that some states use total area for these statistics while others use only deer habitat (and some differ on what is included in deer habitat). Therefore, per square mile estimates are very comparable across years for a given state/province, but not always across states/provinces.

## ANTLERED BUCK HARVEST

With respect to antlered buck harvest (those 1½ years or older), the 2010-11 season was better than the 2009-10 season for the majority of hunters in the U.S. and Canada. Of the 35 states we received data from for the past two seasons, 19 (54 percent) shot more antlered bucks in 2010. Two of three (67 percent) provinces also shot more antlered bucks in 2010. In total, the Midwest, Northeast and Southeast regions tagged over 2.7 million bucks, and another 116,147 bucks were taken in Canada. Texas continued its tradition of harvesting the most with an astounding 357,378 antlered bucks! Michigan was next with 212,341 and Georgia was third with 155,255 antlered bucks.

**In the Midwest**, hunters shot 1,017,699 antlered bucks, nearly identical to the number in 2009. Kansas and Nebraska hunters shot 9 percent more bucks in 2010, and Wisconsin hunters shot 10 percent more. On the flip side, Minnesota hunters shot 7 percent fewer bucks than in 2009, Ohio shot 8 percent fewer, and South Dakota shot 10 percent fewer. Numerically,

Michigan shot the most bucks (212,341), while Wisconsin (4.4) and Indiana (4.3) reported the most bucks per square mile. These are *incredible* buck harvest rates and are more than double the Midwest average of 1.9 bucks per square mile. Even more impressive is that 53 and 60 percent of the bucks harvested in Wisconsin and Indiana were 2½ years old or older. The Midwest ranged from harvesting 0.4 bucks per square mile in North Dakota to 4.4 per square mile in Wisconsin.

**In the Northeast**, hunters shot 479,188 antlered bucks. This was 3 percent fewer than in 2009, but nine of 13 states actually shot more bucks in 2010. The lower total buck harvest was largely due to West Virginia shooting 27 percent fewer bucks in 2010. The largest mast crop on record and extreme rain in parts of the state during the first two days of the season significantly reduced West Virginia hunters' success. Virginia also shot 12 percent fewer bucks while Pennsylvania (+13 percent), Delaware (+15 percent), and Rhode Island (+28 percent) all enjoyed banner years. Numerically, Pennsylvania shot the most bucks (122,930), followed by New York (106,960) and Virginia (95,831). The Northeast averaged shooting 2.1 bucks per square mile and ranged from 0.4 bucks in Maine to 3.8 per square mile in Maryland and New Jersey.

**In the Southeast**, hunters shot 1,252,251 antlered bucks. This was 16 percent more than in 2009 when using only data from states that reported their harvest

for both years. Five of nine states shot fewer bucks in 2010 than 2009, but their decreases ranged from -1 percent in North Carolina to -6 percent in Arkansas. Conversely, four states shot more and their increases ranged from +4 percent in Louisiana to +19 percent in Texas. Numerically, Texas shot the most bucks (357,378) with Georgia (155,255), Alabama (129,000), South Carolina (116,755), and Florida (102,862) also surpassing the 100,000 mark. The Southeast averaged shooting 3.0 bucks per square mile and ranged from 1.7 bucks in Oklahoma to a nation high of 5.8 per square mile in Texas. The Lonestar State shot nearly six bucks per square mile in 2010 while there are places in New England where the entire herd measures less than 6 deer per square mile!

**In Canada**, hunters shot 116,147 antlered bucks in 2010. Ontario shot the most (35,000), followed by Quebec (29,726) and Saskatchewan (24,800). From 2009 to 2010, Nova Scotia shot 18 percent fewer bucks while Quebec shot 23 percent more. Quebec shot the most bucks per square mile (0.6), and this was three times the Canadian average. While the bucks killed per square mile in Canada is much lower than each U.S. region, it is important to remember that provinces are at the northern limit of the whitetail range, and they experience severe winters and short growing seasons. Maine and North Dakota both border Canada and have similar per square mile buck harvest rates.



Whitetail Report Regions

*Of the 35 states we received data from for the past two seasons, 54 percent of them shot more antlered bucks in 2010 than in 2009.*

## ESTIMATED BUCK HARVEST

## Antlered Bucks 1½ Years and Older

| State/Province         | 2008             | 2009             | 2010             | % change<br>'09 to '10 | Bucks<br>PSM** |
|------------------------|------------------|------------------|------------------|------------------------|----------------|
| Illinois               | 71,813           | 69,697           | 69,139           | -1                     | 2.6            |
| Indiana                | 50,845           | 52,981           | 53,007           | 0                      | 4.3            |
| Iowa                   | 51,710           | 49,612           | 48,749           | -2                     | 1.6            |
| Kansas                 | 41,462           | 39,629           | 43,047           | 9                      | 0.5            |
| Kentucky               | 54,936           | 55,290           | 59,170           | 7                      | 1.5            |
| Michigan               | 248,350          | 215,120          | 212,341          | -1                     | 3.6            |
| Minnesota              | 96,000           | 94,367           | 88,000           | -7                     | 1              |
| Missouri               | 99,957           | 107,150          | 104,607          | -2                     | 1.6            |
| Nebraska               | 36,235           | 34,768           | 37,967           | 9                      | 0.5            |
| North Dakota           | 33,963           | 29,707           | 30,900           | 4                      | 0.4            |
| Ohio                   | 89,962           | 93,905           | 86,017           | -8                     | 2.1            |
| South Dakota           | 33,413           | 40,333           | 36,377           | -10                    | 0.5            |
| Wisconsin              | 138,507          | 134,696          | 148,378          | 10                     | 4.4            |
| <b>Midwest Total</b>   | <b>1,047,153</b> | <b>1,017,255</b> | <b>1,017,699</b> | <b>&lt;1</b>           | <b>1.9</b>     |
| Connecticut            | 5,892            | 5,534            | 5,299            | -4                     | 1.4            |
| Delaware               | 3,771            | 3,461            | 3,993            | 15                     | 2.5            |
| Maine                  | 13,564           | 11,141           | 12,230           | 10                     | 0.4            |
| Maryland               | 34,725           | 32,646           | 32,062           | -2                     | 3.8            |
| Massachusetts          | 5,582            | 5,444            | 5,703            | 5                      | 1.3            |
| New Hampshire          | 6,390            | 5,940            | 6,015            | 1                      | 0.7            |
| New Jersey             | 18,399           | 19,181           | 19,925           | 4                      | 3.8            |
| New York               | 105,747          | 102,057          | 106,960          | 5                      | 2.3            |
| Pennsylvania           | 122,410          | 108,330          | 122,930          | 13                     | 3              |
| Rhode Island           | 1,055            | 1,089            | 1,394            | 28                     | 2.1            |
| Vermont                | 9,539            | 8,039            | 8,430            | 5                      | 1.1            |
| Virginia               | 112,207          | 108,623          | 95,831           | -12                    | 2.7            |
| West Virginia          | 86,914           | 80,036           | 58,416           | -27                    | 2.6            |
| <b>Northeast Total</b> | <b>526,195</b>   | <b>491,521</b>   | <b>479,188</b>   | <b>-3</b>              | <b>2.1</b>     |
| Alabama                | *                | 115,200          | 129,000          | 12                     | 2.7            |
| Arkansas               | 93,375           | 88,710           | 82,973           | -6                     | 1.9            |
| Florida                | *                | *                | 102,862          | *                      | 2.3            |
| Georgia                | 159,567          | 140,142          | 155,255          | 11                     | 4.1            |
| Louisiana              | 87,010           | 81,015           | 84,425           | 4                      | 3.2            |
| Mississippi            | 132,167          | *                | *                | *                      | *              |
| North Carolina         | 85,051           | 81,283           | 80,430           | -1                     | 1.9            |
| Oklahoma               | 59,449           | 65,755           | 63,314           | -4                     | 1.7            |
| South Carolina         | 119,346          | 120,356          | 116,755          | -3                     | 4.8            |
| Tennessee              | 93,873           | 83,536           | 79,859           | -4                     | 1.9            |
| Texas                  | 340,159          | 300,575          | 357,378          | 19                     | 5.8            |
| <b>Southeast Total</b> | <b>1,169,997</b> | <b>1,076,572</b> | <b>1,252,251</b> | <b>16</b>              | <b>3.0</b>     |
| <b>3-Region Total</b>  | <b>2,743,345</b> | <b>2,585,348</b> | <b>2,749,138</b> | <b>6</b>               | <b>2.3</b>     |
| Arizona                | 5,080            | 13,088           | 5,910            | -55                    | *              |
| California             | *                | 0                | 0                | *                      | 0              |
| Colorado               | *                | *                | *                | *                      | *              |
| Idaho                  | 13,610           | *                | 13,665           | *                      | *              |
| Montana                | *                | *                | *                | *                      | *              |
| Nevada                 | *                | *                | *                | *                      | *              |
| New Mexico             | 137              | 300              | *                | *                      | *              |
| Oregon                 | 815              | *                | *                | *                      | *              |
| Utah                   | *                | *                | 0                | *                      | 0              |
| Washington             | *                | *                | *                | *                      | *              |
| Wyoming                | 8,304            | 8,548            | 8,154            | -5                     | *              |
| <b>West Total</b>      | <b>27,946</b>    | <b>21,936</b>    | <b>27,729</b>    | <b>***</b>             | <b>0</b>       |
| Manitoba               | *                | *                | 16,769           | *                      | 0.03           |
| New Brunswick          | *                | 3,845            | 3,914            | 2                      | 0.2            |
| Nova Scotia            | *                | 7,199            | 5,938            | -18                    | *              |
| Ontario                | *                | *                | 35,000           | *                      | 0.04           |
| Quebec                 | *                | 24,133           | 29,726           | 23                     | 0.6            |
| Saskatchewan           | *                | *                | 24,800           | *                      | *              |
| <b>Canada Total</b>    | <b>0</b>         | <b>35,177</b>    | <b>116,147</b>   | <b>***</b>             | <b>0.2</b>     |

\* data not available/provided \*\*PSM: Per Square Mile in 2010 \*\*\*Not comparable year to year

*"The Lonestar State shot nearly six bucks per square mile in 2010 while there are places in New England where the entire herd measures less than 6 deer per square mile!"*

### Top-5 States 2010 Antlered Buck Harvest

|           |         |
|-----------|---------|
| Texas     | 357,378 |
| Michigan  | 212,341 |
| Georgia   | 155,255 |
| Wisconsin | 148,378 |
| Alabama   | 129,000 |

### Top-5 States 2010 Buck Harvest/square mile

|                |     |
|----------------|-----|
| Texas          | 5.8 |
| South Carolina | 4.8 |
| Wisconsin      | 4.4 |
| Indiana        | 4.3 |
| Georgia        | 4.1 |

## AGE STRUCTURE OF THE BUCK HARVEST

The QDMA also acquired the age structure of the buck harvest data for most states and provinces. Twenty-six states reported the percentage of their antlered buck harvest that was 1½ years old, and 21 states reported the percentage that was also 2½ and 3½ years or older. Only one Canadian province (New Brunswick) reported age structure data, so this analysis will be limited to the Midwest, Northeast and Southeast U.S. In 2010, the average percentage of the antlered buck harvest that was 1½ years old was 38 percent, which is the lowest national percentage ever reported! The line graph on this page shows how the yearling percentage of the antlered buck harvest in the U.S. has changed during the past 21 years.

In 2010, Kansas averaged the fewest yearlings (9 percent of antlered buck harvest) and Vermont reported the most (68 percent of antlered buck harvest). However, the majority of Vermont's data came from their youth hunt (where there are not any antler restrictions) and likely is not representative of their overall antlered buck harvest that includes a statewide

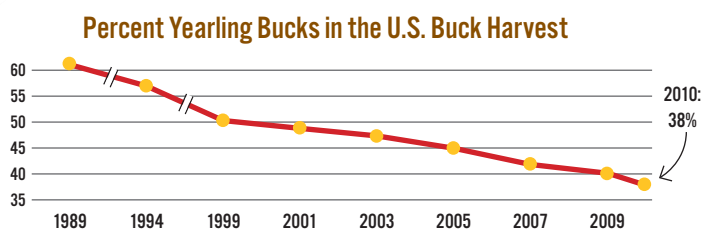
percent) Midwest states and five of nine (56 percent) Northeast states shot a lower percentage of yearlings, while four of five (80 percent) Southeast states shot a higher percentage of yearlings in 2010.

Kentucky (40 to 33 percent) and Wisconsin (54 to 47 percent) had the biggest declines in percentage of yearlings from 2009 to 2010. Georgia (37 to 47 percent), Michigan (52 to 64 percent) and Vermont (50 to 68 percent) reported the largest increases in yearling buck harvest percentage from 2009 to 2010. Again, Vermont's seemingly large percentage increase is due more to a change in data collection technique than a change

in herd or harvest age structure. Other notables include Nebraska's drop to only 25 percent yearlings in the buck harvest; Maryland, New York and Rhode Island all decreased their percentage of yearlings in the harvest; and the Southeast reduced their region wide average to only 27 percent yearling bucks in the antlered buck harvest. Regionally speaking, the Southeast reported a much lower harvest of yearling bucks than the Midwest (38 percent) or Northeast (49 percent). In 2010, the Midwest and Southeast both reduced the percentage of yearlings in the harvest by 5 percent while the Northeast average remained equal to its 2009 value.

The average percentage of the antlered buck harvest that was 2½ years old was similar in 2009 (31 percent) and 2010 (30 percent). In 2010, this statistic ranged from 19 percent in Louisiana DMAP areas and Texas to 41 percent in Kentucky and 50 percent in Missouri's APR counties (Missouri averaged 35 percent in non-APR counties). Georgia (33 percent), Kansas (35 percent), Rhode Island (37 percent), Indiana (38 percent), Tennessee (38 percent), Kentucky (41 percent), and Missouri all reported

*In 2010, the average percentage of the antlered buck harvest that was 1½ years old was 38 percent, which is the lowest national percentage ever reported!*



antler point restriction (APR) and protects the majority of yearling bucks. Other notables include Arkansas (10 percent), Louisiana (17 percent from DMAP areas) and Missouri (17 percent in APR counties) all averaging less than one yearling per five harvested antlered bucks.

Of the 22 states that provided age structure data in 2009 and 2010, 10 states shot a lower percentage, two shot the same percentage, and 10 shot a higher percentage of yearlings in 2010. Five of eight (63

### Top-6 States With Lowest Yearling-Buck Harvest Rates

| State                   | 2010 Percentage |
|-------------------------|-----------------|
| Kansas                  | 9               |
| Arkansas                | 10              |
| Louisiana (DMAP areas)  | 17              |
| Missouri (APR counties) | 17              |
| Rhode Island            | 22              |
| Texas                   | 22              |

### Top-5 States With Highest Harvest of 3½-year-old and Older Bucks

| State                  | 2010 Percentage |
|------------------------|-----------------|
| Arkansas               | 68              |
| Louisiana (DMAP areas) | 65              |
| Texas                  | 59              |
| Kansas                 | 56              |
| Oklahoma               | 51              |

more than one in three harvested bucks as 2½ years old. Hunters in these states are obviously benefitting from passing yearling bucks.

Twenty-one of 26 states (81 percent) that we received age-structure data from were able to also provide the percentage of bucks 3½ years and older in the harvest; kudos to these states for their data collection efforts. The average percentage of the antlered buck harvest that was 3½ years and older was 32 percent in 2010, matching the percentage in 2009. This is higher than the percentage of 2½ year olds and not much lower than the percentage of yearlings. This is a testament to how far we've come as hunters and managers in the past decade. This statistic ranged from 8 percent in Vermont and 9 percent in New Jersey to 65 percent in Louisiana's DMAP areas and 68 percent in Arkansas. Other notables included Oklahoma (51 percent), Kansas (56 percent) and Texas (59 percent). Nine of 18 states (50 percent) with comparable data for 2009 and 2010 shot a higher percentage of 3½ years and older bucks in 2010. Regionally, the Northeast (22 percent) and Midwest (28 percent) had similar percentages while the Southeast averaged about twice the percentage (47 percent) of bucks in these older age classes.

## BUCK HARVEST BY AGE CLASS

| State/Province           | 1½ Years Old |           |           | 2½ Years Old |           |           | 3½ Years Old |           |           |
|--------------------------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|
|                          | 2008         | 2009      | 2010      | 2008         | 2009      | 2010      | 2008         | 2009      | 2010      |
| Illinois                 | 41           | 39        | 39        | *            | *         | *         | *            | *         | *         |
| Indiana                  | 40           | 36        | 40        | 40           | 40        | 38        | 20           | 24        | 22        |
| Iowa                     | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| Kansas                   | 17           | *         | 9         | 34           | *         | 35        | 49           | *         | 56        |
| Kentucky                 | 41           | 40        | 33        | 38           | 38        | 41        | 21           | 22        | 26        |
| Michigan                 | 61           | 52        | 57        | 25           | 28        | 25        | 14           | 20        | 18        |
| Minnesota                | 67           | 41        | *         | 23           | *         | *         | 10           | *         | *         |
| Missouri                 | 22(58)**     | 19(51)**  | 17(45)**  | 54(31)**     | 44(31)**  | 50(35)**  | 24(11)**     | 37(19)**  | 33(20)**  |
| Nebraska                 | 34           | 31        | 25        | *            | *         | *         | *            | *         | *         |
| North Dakota             | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| Ohio                     | 50           | 49        | 47        | 32           | 32        | 31        | 18           | 19        | 22        |
| South Dakota             | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| Wisconsin                | 53           | 54        | 47        | *            | 26        | 30        | *            | 20        | 23        |
| <b>Midwest Average</b>   | <b>44</b>    | <b>43</b> | <b>38</b> | <b>34</b>    | <b>34</b> | <b>34</b> | <b>22</b>    | <b>23</b> | <b>28</b> |
| Connecticut              | 40           | *         | 40        | *            | *         | *         | *            | *         | *         |
| Delaware                 | 53           | *         | *         | 28           | *         | *         | 19           | *         | *         |
| Maine                    | 37           | 44        | 48        | 23           | 25        | 25        | 40           | 31        | 27        |
| Maryland                 | 62           | 57        | 53        | *            | *         | *         | *            | *         | *         |
| Massachusetts            | 48           | 49        | *         | 29           | 28        | *         | 23           | 23        | *         |
| New Hampshire            | 45           | 45        | 46        | 26           | 27        | 26        | 29           | 28        | 28        |
| New Jersey               | 64           | 60        | 59        | *            | 31        | 32        | *            | 9         | 9         |
| New York                 | 62           | 59        | 55        | 26           | 27        | 28        | 12           | 14        | 17        |
| Pennsylvania             | 52           | 49        | 48        | 35           | *         | *         | 13           | *         | *         |
| Rhode Island             | 38           | 27        | 22        | 27           | 38        | 37        | 35           | 36        | 41        |
| Vermont                  | 15           | 50        | 68        | 59           | 30        | 24        | 26           | 20        | 8         |
| Virginia                 | 37           | 48        | 49***     | 37           | 34        | 31***     | 26           | 18        | 20***     |
| West Virginia            | *            | 27        | *         | *            | 52        | *         | *            | 21        | *         |
| <b>Northeast Average</b> | <b>45</b>    | <b>49</b> | <b>49</b> | <b>32</b>    | <b>30</b> | <b>29</b> | <b>22</b>    | <b>22</b> | <b>22</b> |
| Alabama                  | 25           | 25        | 27***     | 35           | 35        | 30***     | 40           | 40        | 43***     |
| Arkansas                 | 13           | 10        | 10        | 38           | 26        | 22        | 49           | 64        | 68        |
| Florida                  | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| Georgia                  | 45           | 37        | 47        | 32           | 29        | 33        | 23           | 34        | 20        |
| Louisiana                | 24           | 16***     | 17***     | 22           | 19***     | 19***     | 54           | 65***     | 65***     |
| Mississippi              | 18***        | 14***     | *         | 22***        | 20***     | *         | 60***        | 66***     | *         |
| North Carolina           | 39***        | *         | *         | 39***        | *         | *         | 22***        | *         | *         |
| Oklahoma                 | 27           | *         | 23        | 32           | *         | 26        | 41           | *         | 51        |
| South Carolina           | 59           | 65        | *         | 23           | 20        | *         | 18           | 15        | *         |
| Tennessee                | 44           | 38        | 42        | 40           | 42        | 38        | 16           | 20        | 20        |
| Texas                    | 27           | *         | 22        | 19           | *         | 19        | 54           | *         | 59        |
| <b>Southeast Average</b> | <b>31</b>    | <b>32</b> | <b>27</b> | <b>29</b>    | <b>29</b> | <b>27</b> | <b>37</b>    | <b>40</b> | <b>47</b> |
| <b>3-Region Average</b>  | <b>40</b>    | <b>41</b> | <b>38</b> | <b>32</b>    | <b>31</b> | <b>30</b> | <b>27</b>    | <b>32</b> | <b>32</b> |
| Manitoba                 | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| New Brunswick            | *            | 39        | 54        | *            | 23        | 15        | *            | 38        | 31        |
| Nova Scotia              | *            | 26        | *         | *            | 22        | *         | *            | 52        | *         |
| Ontario                  | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| Quebec                   | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| Saskatchewan             | *            | *         | *         | *            | *         | *         | *            | *         | *         |
| <b>Canada Average</b>    | <b>*</b>     | <b>33</b> | <b>54</b> | <b>*</b>     | <b>23</b> | <b>15</b> | <b>*</b>     | <b>45</b> | <b>31</b> |

\* data not provided/available

\*\* data from antler-point-restriction counties (non-antler-point-restriction counties)

\*\*\* data from check stations and/or DMAP areas



## ANTLERLESS HARVEST

Antlerless harvests vary widely among states/provinces and years due to differences in deer density, productivity, a state/province's goals (reducing, stabilizing, or increasing the deer population), weather and other factors. However, we can learn much about an agency's management program by comparing the antlerless and antlered buck harvest.

Continuing with the analysis of states in the Midwest, Northeast and Southeast, hunters from these regions harvested 3,335,213 antlerless deer in 2010 (does not include data from Mississippi). This harvest was nearly identical to the 2009 antlerless harvest when using data only from states providing 2009 and 2010 harvests. Overall, Texas topped the list with 330,698 antlerless deer. Georgia followed with 308,747, Alabama was third with 208,000, and Michigan was fourth with 205,509 antlerless deer. Interestingly, the three top antlerless harvests were all in the Southeast; the region expressing the most concern with coyote predation. Georgia harvested the most antlerless deer per square mile (8.1), followed by Maryland (7.5), New Jersey (7.4) and Indiana (6.7). These are astounding harvest rates and are higher than comparable rates in 2009. As stated earlier, these states are shooting more antlerless deer per square mile than some areas have for a standing crop of bucks, does and fawns combined! Regionally, the Southeast averaged shooting more antlerless deer per square mile (3.5) than the Northeast (3.1) and Midwest (2.5).

Also regionally, **the Midwest** shot 7 percent fewer antlerless deer in 2010 (1,281,421) than in 2009 (1,384,454). Numerically, North Dakota (38,400) and Nebraska (39,198) shot the fewest antlerless deer, and Wisconsin (185,211) and Michigan (205,509) shot the most. However, it's important to note that Nebraska was one of only two states in the Midwest to shoot more antlerless deer in 2010 than 2009, and Nebraska increased its antlerless harvest by 32 percent! Indiana shot the most per square mile (6.7), followed by Wisconsin (5.4), Illinois (4.2) and Ohio (3.8). Kansas and North Dakota only harvested 0.5 antlerless deer per square mile.

Ten of 13 (77 percent) Midwest states shot more antlerless deer than antlered bucks. Only Kansas, Kentucky and Minnesota shot more antlered bucks than antlerless deer. The Midwest averaged shooting 1.3 antlerless deer per antlered buck, and this ranged from 0.9 in Kansas and Kentucky to 1.6 in Illinois, Iowa and Missouri to 1.8 in Ohio.

**The Northeast** shot 628,826 antler-

*Nebraska was one of only two states in the Midwest to shoot more antlerless deer in 2010 than 2009, and Nebraska increased its antlerless harvest by 32 percent!*

averaged the fewest at 0.2 in Maine, 0.5 in New Hampshire and 0.9 antlerless deer harvested per square mile in Vermont; a testament to the differences in deer management programs in states with severe winters.

For the second year in a row, only seven of 13 (54 percent) Northeastern states shot more antlerless deer than antlered bucks. However, five of six states that shot more bucks are in New England. Also for the second year in a row, West Virginia was the only Northeastern state not in the extreme northeast portion of this region that harvested fewer antlerless deer than antlered bucks. West Virginia hunters had a tough year as they shot 36 percent fewer antlerless deer and 27 percent fewer antlered bucks in 2010. Hopefully the 2011 season is better for them. The Northeast averaged shooting 1.2 antlerless deer per antlered buck and this ranged from 0.4 in Maine to 2.6 antlerless deer per antlered buck in Delaware.

**The Southeast** (minus Mississippi) shot 1,424,966 antlerless deer in 2010. Numerically, Oklahoma (46,000) and Louisiana (69,075) took the fewest while Georgia (308,747) and Texas (330,698) took the most antlerless deer. Texas had the largest numerical (+71,916) and percentage (+28 percent) increases from 2009. Seven of nine southeastern states shot more antlerless deer in 2010 than 2009. Only Oklahoma (-9 percent) and South Carolina (-5 percent) reported fewer antlerless deer in 2010. The increased harvests ranged from 4 percent in Louisiana to 19 percent in Georgia, 20 percent in Alabama and 28 percent in Texas. Georgia shot the most antlerless deer per square mile (8.1), followed by Texas (5.4) and South Carolina (5.3). Oklahoma (1.2) and Florida (1.7) averaged the fewest antlerless deer harvested per square mile.

### Top-5 States 2010 Antlerless Harvest

|              |         |
|--------------|---------|
| Texas        | 330,698 |
| Georgia      | 308,747 |
| Alabama      | 208,000 |
| Michigan     | 205,509 |
| Pennsylvania | 193,310 |

### Top-5 States 2010 Antlerless Harvest Per Square Mile

|            |     |
|------------|-----|
| Georgia    | 8.1 |
| Maryland   | 7.5 |
| New Jersey | 7.4 |
| Indiana    | 6.7 |
| Delaware   | 6.4 |

### Top-5 States 2010 Antlerless Harvest Per Antlered Buck Harvested

|            |     |
|------------|-----|
| Delaware   | 2.6 |
| Georgia    | 2.0 |
| Maryland   | 2.0 |
| New Jersey | 1.8 |
| Ohio       | 1.8 |

less deer in 2010, 8 percent fewer than in 2009. Numerically, Rhode Island (1,104) and New Hampshire (3,744) took the fewest while Virginia (126,243) and Pennsylvania (193,310) took the most antlerless deer. Connecticut (+9 percent) and Delaware (+14 percent) had the largest increases, while Maine (-25 percent) and West Virginia (-36 percent) had the largest declines from 2009 to 2010. Maryland shot the most antlerless deer per square mile (7.5), followed by New Jersey (7.4) and Delaware (6.4). Northern New England



## ESTIMATED ANTLERLESS DEER HARVEST

| State/Province         | 2008             | 2009             | 2010             | % change '09 to '10 | antlerless PSM** | antlerless per antlered |
|------------------------|------------------|------------------|------------------|---------------------|------------------|-------------------------|
| Illinois               | 117,088          | 119,937          | 113,131          | -6                  | 4.2              | 1.6                     |
| Indiana                | 78,903           | 79,771           | 80,997           | 2                   | 6.7              | 1.5                     |
| Iowa                   | 90,484           | 86,892           | 78,345           | -10                 | 2.6              | 1.6                     |
| Kansas                 | 39,028           | 47,418           | 42,806           | -10                 | 0.5              | 1.0                     |
| Kentucky               | 65,674           | 58,295           | 51,206           | -12                 | 1.3              | 0.9                     |
| Michigan               | 241,573          | 220,916          | 205,509          | -7                  | 3.5              | 1.0                     |
| Minnesota              | 126,000          | 99,819           | 78,500           | -21                 | 0.9              | 0.9                     |
| Missouri               | 182,162          | 189,647          | 170,592          | -10                 | 2.2              | 1.6                     |
| Nebraska               | 32,397           | 29,711           | 39,198           | 32                  | 0.5              | 1.0                     |
| North Dakota           | 57,577           | 45,119           | 38,400           | -15                 | 0.5              | 1.2                     |
| Ohio                   | 162,055          | 167,355          | 153,458          | -8                  | 3.8              | 1.8                     |
| South Dakota           | 30,459           | 47,017           | 44,068           | -6                  | 0.6              | 1.2                     |
| Wisconsin              | 313,378          | 192,557          | 185,211          | -4                  | 5.4              | 1.2                     |
| <b>Midwest Total</b>   | <b>1,536,778</b> | <b>1,384,454</b> | <b>1,281,421</b> | <b>-7</b>           | <b>2.5</b>       | <b>1.3</b>              |
| Connecticut            | 6,790            | 6,240            | 6,813            | 9                   | 1.8              | 1.3                     |
| Delaware               | 10,105           | 8,939            | 10,190           | 14                  | 6.4              | 2.6                     |
| Maine                  | 7,497            | 6,951            | 5,204            | -25                 | 0.2              | 0.4                     |
| Maryland               | 65,712           | 65,635           | 63,821           | -3                  | 7.5              | 2.0                     |
| Massachusetts          | 5,620            | 4,884            | 5,090            | 4                   | 1.1              | 0.9                     |
| New Hampshire          | 4,526            | 4,444            | 3,744            | -16                 | 0.5              | 0.6                     |
| New Jersey             | 34,859           | 33,603           | 35,479           | 6                   | 7.4              | 1.8                     |
| New York               | 117,232          | 120,741          | 123,140          | 2                   | 2.6              | 1.2                     |
| Pennsylvania           | 213,440          | 200,590          | 193,310          | -4                  | 4                | 1.6                     |
| Rhode Island           | 1,210            | 1,035            | 1,104            | 7                   | 1.7              | 0.8                     |
| Vermont                | 7,452            | 7,148            | 7,051            | -1                  | 0.9              | 0.8                     |
| Virginia               | 144,175          | 150,401          | 126,243          | -16                 | 3.5              | 1.3                     |
| West Virginia          | 76,689           | 74,376           | 47,637           | -36                 | 2.1              | 0.8                     |
| <b>Northeast Total</b> | <b>695,307</b>   | <b>684,987</b>   | <b>628,826</b>   | <b>-8</b>           | <b>3.1</b>       | <b>1.2</b>              |
| Alabama                | *                | 173,800          | 208,000          | 20                  | 4.3              | 1.6                     |
| Arkansas               | 74,963           | 98,332           | 103,192          | 5                   | 2.3              | 1.2                     |
| Florida                | *                | *                | 75,683           | *                   | 1.7              | 0.7                     |
| Georgia                | 239,350          | 258,536          | 308,747          | 19                  | 8.1              | 2.0                     |
| Louisiana              | 71,190           | 66,285           | 69,075           | 4                   | 2.6              | 0.8                     |
| Mississippi            | 148,687          | *                | *                | *                   | *                | *                       |
| North Carolina         | 91,246           | 87,990           | 94,727           | 8                   | 2.2              | 1.2                     |
| Oklahoma               | 45,820           | 50,420           | 46,000           | -9                  | 1.2              | 0.7                     |
| South Carolina         | 129,432          | 111,338          | 105,894          | -5                  | 5.3              | 0.9                     |
| Tennessee              | 70,540           | 78,243           | 82,950           | 6                   | 2                | 1.0                     |
| Texas                  | 279,491          | 258,782          | 330,698          | 28                  | 5.4              | 0.9                     |
| <b>Southeast Total</b> | <b>1,150,719</b> | <b>1,183,726</b> | <b>1,424,966</b> | <b>20</b>           | <b>3.5</b>       | <b>1.1</b>              |
| <b>3-Region Total</b>  | <b>3,382,804</b> | <b>3,253,167</b> | <b>3,335,213</b> | <b>3.0</b>          | <b>3.0</b>       | <b>1.2</b>              |
| Arizona                | 0                | 138              | 0                | -100                | *                | 0.0                     |
| California             | *                | 0                | 0                | *                   | 0                | *                       |
| Colorado               | *                | *                | *                | *                   | *                | *                       |
| Idaho                  | 6,149            | *                | 5,441            | *                   | *                | 0.4                     |
| Montana                | *                | *                | *                | *                   | *                | *                       |
| Nevada                 | *                | *                | *                | *                   | *                | *                       |
| New Mexico             | 0                | 0                | *                | *                   | *                | *                       |
| Oregon                 | 63               | *                | *                | *                   | *                | *                       |
| Utah                   | *                | *                | 0                | *                   | *                | *                       |
| Washington             | *                | *                | *                | *                   | *                | *                       |
| Wyoming                | 6,488            | 6,865            | 6,496            | -5                  | *                | 0.8                     |
| <b>West Total</b>      | <b>12,700</b>    | <b>7,003</b>     | <b>11,937</b>    | <b>***</b>          | <b>0</b>         | <b>0.4</b>              |
| Manitoba               | *                | *                | 9,030            | *                   | 0.02             | 0.5                     |
| New Brunswick          | *                | 1,199            | 1,179            | -2                  | 0.05             | 0.3                     |
| Nova Scotia            | *                | 3,081            | 4,034            | 31                  | *                | 0.7                     |
| Ontario                | *                | *                | 30,000           | *                   | 0.03             | 0.9                     |
| Quebec                 | *                | 26,605           | 22,744           | -15                 | 0.3              | 0.8                     |
| Saskatchewan           | *                | *                | 13,600           | ***                 | *                | 0.5                     |
| <b>Canada Total</b>    | <b>0</b>         | <b>30,885</b>    | <b>80,587</b>    |                     | <b>0.1</b>       | <b>0.6</b>              |

\* data not available/provided \*\*Per Square Mile in 2010 \*\*\*Not comparable year to year

Five of ten (50 percent) Southeastern states shot more antlerless deer than antlered bucks in 2010. The Southeast averaged shooting 1.1 antlerless deer per antlered buck and this ranged from 0.7 in Florida and Oklahoma to 1.6 in Alabama and 2.0 antlerless deer per antlered buck in Georgia.

Canada shot 80,587 antlerless deer in 2010. For the three provinces that provided data in 2009 and 2010, this was 9 percent fewer antlerless deer. Numerically, New Brunswick (1,179) and Nova Scotia (4,034) took the fewest while Quebec (22,744) and Ontario (30,000) took the most antlerless deer. New Brunswick (-2 percent) and Quebec (-15 percent) shot fewer antlerless deer in 2010 while Nova Scotia (+31 percent) shot more. Quebec shot the most antlerless deer per square mile (0.3), followed by New Brunswick (0.05), Ontario (0.03) and Manitoba (0.02). All provinces shot more antlered bucks than antlerless deer, and the numbers ranged from 0.3 antlerless deer per antlered buck in New Brunswick to 0.9 in Ontario. In general, provincial harvest statistics are similar to those in New England and upper Great Plains states.

Reduced antlerless harvests are necessary in areas where deer herds have been balanced with the habitat and/or when other mortality factors (such as predation or disease) are increasing. However, very few states should be harvesting more antlered bucks than antlerless deer on a regular basis. In 2010, 14 of 36 states (39 percent) shot more antlered bucks than antlerless deer; up from 33 percent of states in 2009. Hopefully the 2011 harvest shows far fewer states harvesting more bucks than antlerless deer.

## PERCENT OF DEER HARVEST "BIOCHECKED"

All states and provinces have some means to estimate the number of deer harvested in their jurisdictions during the hunting season. Some require physical registration at a station, some offer online reporting, and others use telephone reporting (telecheck) or mail-in report cards. Regardless of the technique used, it is important for deer managers to collect biological data – such as age, weight, antler parameters, and lactation status – from a representative sample of the total harvest. Commonly referred to as check stations or “biocheck” stations, biologists, technicians and

*Longer deer seasons combined with reduced agency budgets and manpower make collecting reliable harvest data an increasingly difficult task. The proper percentage to biocheck varies based on the total number of deer harvested, but QDMA prefers to see a minimum of 5 to 10 percent.*

conservation officers collect data that is used to assess herd and habitat health. This data is the backbone of many deer management programs.

We surveyed all state and provincial wildlife agencies to determine the percentage of the total deer harvest that was “biochecked” in 1999, 2004, 2009 and 2010. The following table shows the regional rates for these years.

The Midwest averaged 6 percent in 2010, and this rate declined

from 15 percent in 1999 to the present. It ranged from zero in South Dakota to 31 percent in Nebraska. Interestingly, South Dakota consistently biochecked nearly a third of its annual harvest in 1999, 2004 and 2009. North Dakota, Ohio and Wisconsin all had big increases in percentage of deer biochecked from 2009 to 2010.

### PERCENTAGE OF DEER BIOCHECKED

| State/Province           | 1999      | 2004      | 2009      | 2010     |
|--------------------------|-----------|-----------|-----------|----------|
| Illinois                 | 68        | 61        | 5         | 3        |
| Indiana                  | 2         | 2         | 4         | 3        |
| Iowa                     | 2         | 2         | 4         | 4        |
| Kansas                   | *         | *         | *         | 3        |
| Kentucky                 | 0         | 2         | 2         | 2        |
| Michigan                 | 8         | 9         | 7         | 7        |
| Minnesota                | *         | *         | 2         | <10      |
| Missouri                 | 2         | 2         | 2         | 2        |
| Nebraska                 | 33        | 33        | 33        | 31       |
| North Dakota             | 0         | 0         | 0         | 4        |
| Ohio                     | 5         | 4         | 2         | 5        |
| South Dakota             | 30        | 30        | 30        | 0        |
| Wisconsin                | <1        | 4         | 2         | 6        |
| <b>Midwest Average</b>   | <b>15</b> | <b>13</b> | <b>8</b>  | <b>6</b> |
| Connecticut              | *         | *         | *         | 20       |
| Delaware                 | 0         | 0         | 0         | 0        |
| Maine                    | 21        | 24        | 24        | 23       |
| Maryland                 | 6         | 5         | 5         | 5        |
| Massachusetts            | 35        | 25        | 24        | *        |
| New Hampshire            | 14        | 10        | 8         | 10       |
| New Jersey               | 10        | 9         | 4         | 4        |
| New York                 | 10        | 6         | 7         | 5        |
| Pennsylvania             | 10        | 9         | 9         | 7        |
| Rhode Island             | 20        | 20        | 17        | 15       |
| Vermont                  | 7         | 8         | 4         | 3        |
| Virginia                 | 11        | 11        | 10        | 11       |
| West Virginia            | 2         | 1         | 2         | *        |
| <b>Northeast Average</b> | <b>12</b> | <b>11</b> | <b>10</b> | <b>9</b> |
| Alabama                  | 1         | 1         | 10        | 1        |
| Arkansas                 | *         | 5         | 6         | <1       |
| Florida                  | *         | *         | *         | *        |
| Georgia                  | 3         | 3         | 2         | 2        |
| Louisiana                | 18        | 12        | 8         | 2        |
| Mississippi              | *         | *         | *         | *        |
| North Carolina           | 3         | 3         | 4         | 3        |
| Oklahoma                 | *         | *         | *         | <1       |
| South Carolina           | 1         | 1         | 1         | 1        |
| Tennessee                | 3         | 3         | 3         | 3        |
| Texas                    | *         | *         | *         | 1        |
| <b>Southeast Average</b> | <b>5</b>  | <b>4</b>  | <b>5</b>  | <b>2</b> |
| <b>3-region average</b>  | <b>12</b> | <b>10</b> | <b>8</b>  | <b>6</b> |
| Manitoba                 | *         | *         | *         | <1       |
| New Brunswick            | 16        | 17        | 14        | 14       |
| Nova Scotia              | 100       | 100       | 50        | 8        |
| Ontario                  | *         | *         | *         | 3        |
| Quebec                   | <1        | <1        | <1        | <10      |
| Saskatchewan             | *         | *         | *         | 0        |
| <b>Canada Average</b>    | <b>58</b> | <b>59</b> | <b>32</b> | <b>6</b> |

\* data not available

Regionwide, only three of 13 states (23 percent) biochecked over 5 percent of the 2010 harvest.

The Northeast had the highest average by biochecking 9 percent of the harvest in 2010. This percentage was slightly less but similar to the 1999 to 2009 values. In 2010 it ranged from zero in Delaware to 20 percent in Connecticut and 23 percent in Maine. Five Northeast states biochecked at least 10 percent of the harvest. This is especially impressive in Virginia where hunters shot over 222,000 deer in 2010.

The Southeast averaged biochecking 2 percent of the harvest in 2010. This rate had been consistent at 4 to 5 percent from 1999 to 2009 and then dropped significantly in 2010, mostly due to Alabama, Arkansas and Louisiana. These three states averaged 8 percent in 2009 but only 1 percent in 2010. Regionwide, this percentage ranged from less than 1 percent in Arkansas and Oklahoma to 3 percent in North Carolina and Tennessee. In general, the Southeast biochecks a smaller percentage of the harvest than the Midwest, Northeast or Canada.

Canada averaged 6 percent in 2010, and this rate declined from 58 percent in 1999 and 59 percent in 2004 to the present. It ranged from zero in Saskatchewan to 14 percent in New Brunswick. Notably, Nova Scotia has done a tremendous job of biochecking deer. Their percentage dropped significantly in 2010, but they still collected biological data from nearly 10 percent of the harvest.

Longer deer seasons combined with reduced agency budgets and manpower make collecting reliable harvest data an increasingly difficult task. The proper percentage to biocheck varies based on the total number of deer harvested, but QDMA prefers to see a minimum of 5 to 10 percent.

# 5 REASONS TO JOIN QDMA

*QDMA members made it possible for this young hunter to take her first deer at QDMA's 2011 National Youth Hunt.*



**RESEARCH** • Support deer research that can directly improve your hunting opportunities.

**EDUCATE** • Receive cutting-edge information on deer, habitat and hunting strategies through *Quality Whitetails* magazine and other media.

**ADVOCATE** • Speak for wise management of whitetails by helping QDMA fight misguided wildlife legislation and promote sound policy.

**CERTIFY** • Support programs leading to improved habitat and more knowledgeable deer hunters in your area.

**HUNT** • Ensure your hunting legacy by supporting QDMA's efforts to recruit and retain future deer stewards.

*Your membership dollars fund every arm of QDMA's mission...  
providing benefits to you, the whitetail resource, and tomorrow's hunters.*

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## ANTLER RESTRICTIONS

Some hunters love them, others hate them, but you can rest assured all have an opinion of them – we're talking about antler restrictions. This partly stems from their popularity at the state level as at least 22 states implemented some form of antler restriction to protect yearling bucks in 2011. Antler restrictions are not synonymous with Quality Deer Management. Rather, antler restrictions are a strategy to protect a specific age class (generally 1½-year-old bucks) or classes of bucks. Many antler restrictions have been used including point, spread, and beam-length requirements as well as Boone & Crockett score. All restrictions have advantages and disadvantages. The key to implementing an effective strategy is to devise it from local data and then educate local sportsmen and women on the benefits.

We surveyed all state and provincial wildlife agencies that manage white-tailed deer in 2011 and learned that 22 states and zero Canadian provinces imple-

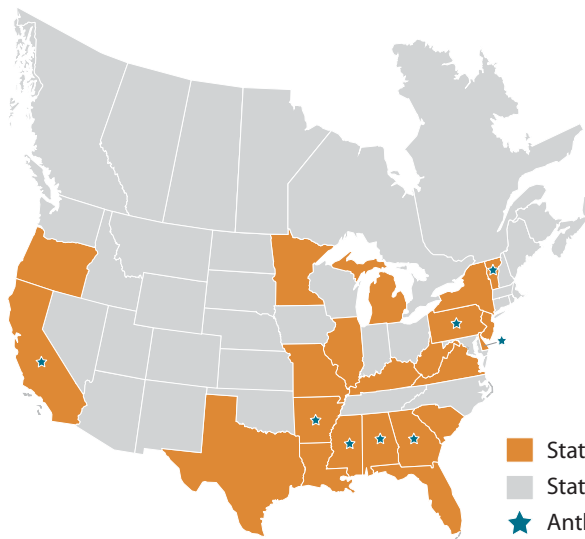
mented antler restrictions (to see the previous survey results from 2008, see the 2009 QDMA *Whitetail Report* at QDMA.com). The restrictions were statewide for at least one buck in the bag limit for eight of these states, and the type varied among number of antler points, antler spread, length of main beam, or a combination of these. Point restrictions were the most commonly

used technique (15 of 22 states), followed by combination restrictions using antler spread and main beam length or antler spread and antler points (four states), and antler spread restrictions (three states).

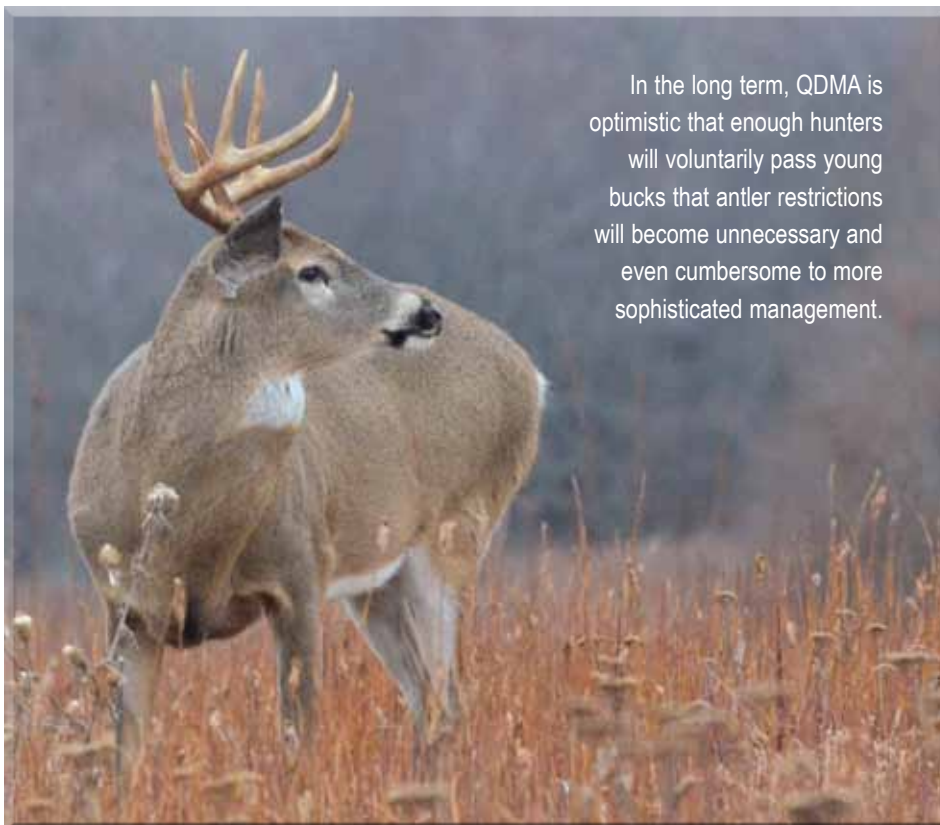
Overall, these findings were very similar to what states used in 2008. New Hampshire was the only state with antler restrictions in 2008 that did not use them in 2011. The New Hampshire Fish and Game Department employed an antler point restriction in one of 18 wildlife management units from 2007 to 2009 and discontinued its use in 2010. Michigan was the only state to discontinue statewide restrictions from 2008 to 2011. Michigan still employs antler point restrictions, they are just not used statewide. California is the only new state to list antler point restrictions in 2011.

Regarding type, the number of states using point, spread and combination restrictions in 2011 were iden-

Antler Restrictions Across North America



- States with an Antler Restriction (see types below)
- States/Provinces with No Antler Restrictions
- Antler Restriction is Statewide



### Points-on-a-Side

Alabama  
California  
Florida  
Georgia  
Illinois  
Louisiana  
Michigan  
Minnesota  
Missouri  
New Jersey  
New York  
Oregon  
Pennsylvania  
Vermont  
Virginia

### Minimum Spread

Delaware  
Kentucky  
West Virginia

### Points or Points/Beam Combination

Arkansas

### Minimum Spread or Minimum Beam Length

Mississippi

### Minimum Points or Minimum Spread

South Carolina

### One Unbranched Antler or Minimum Spread

Texas

tical to 2008.

Regionally, antler restrictions were most common in the Southeast (eight of 11 states), followed by the Northeast (seven of 13 states), Midwest (five of 13 states), and Canada (zero of eight provinces). It's important to note that most Western states did not provide the requested information so they were omitted from this analysis. Antler restrictions have a longer history in the Southeast than other regions. This partly explains their increased use in this region and the type of restrictions employed. Combination restrictions are more intensive and provide managers more flexibility to meet management objectives but are a little more challenging for hunters first exposed to them. All four states using combination restrictions were in the Southeast.

#### QDMA's Recommendation

QDMA is encouraged by the number of states implementing strategies to protect yearling bucks. In general, QDMA prefers the voluntary passing of yearling bucks to mandatory antler regulations. However, we recognize that antler restrictions may be justified in some situations to achieve specific deer management objectives. In the long term, QDMA is optimistic that enough hunters will voluntarily pass young bucks that antler restrictions will become unnecessary and even cumbersome to more sophisticated management.

Regarding our position on specific antler restriction proposals, QDMA examines each on a case-by-case basis and applies a three-part test. First, is the restriction biologically sound? Second, is it supported by the majority of affected hunters and landowners? Finally, will it be objectively monitored to determine success or failure? Many restrictions fail one or more of these criteria. The QDMA has supported some antler restrictions, opposed others, and taken a neutral stance on still others.

Regardless of strategy used to protect yearling bucks, QDMA recommends that state and provincial wildlife agencies conduct extensive education and outreach programs to inform hunters about the benefits of protecting yearling bucks and to garner their support for sound deer management programs.

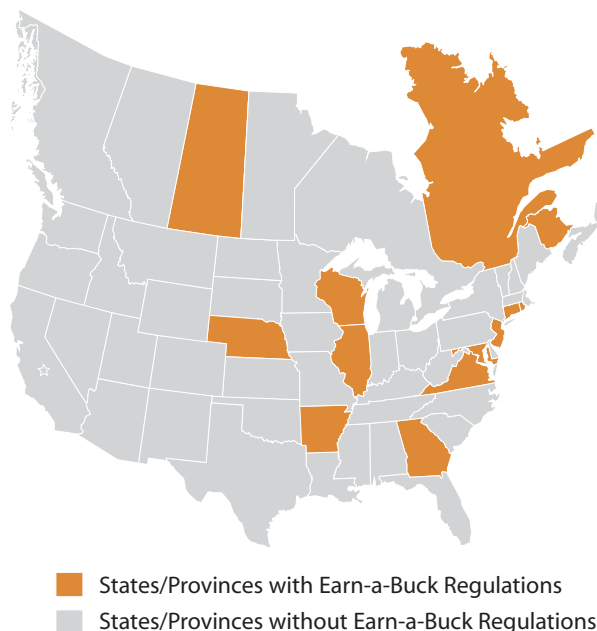
| State/Province   | Antler Restriction | Type            | Statewide |
|------------------|--------------------|-----------------|-----------|
| <b>Southeast</b> |                    |                 |           |
| Alabama          | Y                  | PTS             | Y         |
| Arkansas         | Y                  | PTS OR PTS/BEAM | Y         |
| Florida          | Y                  | PTS             | N         |
| Georgia          | Y                  | PTS             | Y         |
| Louisiana        | Y                  | PTS             | N         |
| Mississippi      | Y                  | SPREAD/BEAM     | Y         |
| North Carolina   | N                  |                 |           |
| Oklahoma         | N                  |                 |           |
| South Carolina   | Y                  | PTS/SPREAD      | N         |
| Tennessee        | N                  |                 |           |
| Texas            | Y                  | SPIKE/SPREAD    | N         |
| <b>Northeast</b> |                    |                 |           |
| Connecticut      | N                  |                 |           |
| Delaware         | Y                  | SPREAD          | Y         |
| Maine            | N                  |                 |           |
| Maryland         | N                  |                 |           |
| Massachusetts    | N                  |                 |           |
| New Hampshire    | N                  |                 |           |
| New Jersey       | Y                  | PTS             | N         |
| New York         | Y                  | PTS             | N         |
| Pennsylvania     | Y                  | PTS             | Y         |
| Rhode Island     | N                  |                 |           |
| Vermont          | Y                  | PTS             | Y         |
| Virginia         | Y                  | PTS             | N         |
| West Virginia    | Y                  | SPREAD          | N         |
| <b>Midwest</b>   |                    |                 |           |
| Illinois         | Y                  | PTS             | N         |
| Indiana          | N                  |                 |           |
| Iowa             | N                  |                 |           |
| Kansas           | N                  |                 |           |
| Kentucky         | Y                  | SPREAD          | N         |
| Michigan         | Y                  | PTS             | N         |
| Minnesota        | Y                  | PTS             | N         |
| Missouri         | Y                  | PTS             | N         |
| Nebraska         | N                  |                 |           |
| North Dakota     | N                  |                 |           |
| Ohio             | N                  |                 |           |
| South Dakota     | N                  |                 |           |
| Wisconsin        |                    |                 |           |
| <b>West</b>      |                    |                 |           |
| Arizona          |                    |                 |           |
| California       | Y                  | PTS             | Y         |
| Colorado         |                    |                 |           |
| Idaho            | N                  |                 |           |
| Montana          |                    |                 |           |
| Nevada           |                    |                 |           |
| New Mexico       |                    |                 |           |
| Oregon           | Y                  | PTS             | N         |
| Utah             |                    |                 |           |
| Washington       |                    |                 |           |
| Wyoming          | N                  |                 |           |
| <b>Canada</b>    |                    |                 |           |
| Alberta          | N                  |                 |           |
| British Columbia | N                  |                 |           |
| Manitoba         | N                  |                 |           |
| New Brunswick    | N                  |                 |           |
| Nova Scotia      | N                  |                 |           |
| Ontario          | N                  |                 |           |
| Quebec           | N                  |                 |           |
| Saskatchewan     | N                  |                 |           |

In 2011 we surveyed all state and provincial wildlife agencies that manage white-tailed deer to determine how frequently EAB strategies are used. Ten states employed earn-a-buck regulations as did three provinces. *No state or province used the regulations statewide or province-wide.* Rather, they used them in specific locations with deer abundance

ly productive deer herds, but interestingly, the Northeast states that employ earn-a-buck (Connecticut, Maryland, New Jersey, Rhode Island and Virginia) all have areas of overlap with high human populations and urban/suburban sprawl.

Earn-a-buck regulations are highly effective at increasing antlerless harvests, but are widely unpopular among hunters. Sportsmen and women should be well informed by their state/provincial agency on the annual target and achieved antlerless harvests and how they impact the agency's deer management program. Hunters should have the opportunity to provide input on their desired strategy for achieving the target antlerless harvest, and state/provincial agencies should accommodate these desires where appropriate. In situations where the target antlerless harvests are not being reached, state/provincial agencies should employ additional measures and/or strategies, such as EAB, to ensure deer herds are being managed at levels in balance with what the habitat can support.

## Earn-a-Buck Regulations Across North America





## CROSSBOW USE

Similar to baiting and antler restrictions, hunter opinions on crossbows are generally polarized. Regardless of your personal stance, crossbows are here to stay and their use expands annually. We surveyed state and provincial wildlife agencies and asked if crossbows were allowed for all hunters during the firearms and archery seasons. Crossbow use is allowed in all contiguous states except one (Oregon) by some faction of hunters (namely senior or physically impaired hunters). More important from a deer management perspective, crossbows are permitted in at least a part of the firearms season for all hunters in 35 (of 48) states and in at least 8 Canadian provinces. More surprising, crossbows are now legal during archery season by all hunters in 22 of 48 (46 percent) states and 3 of 8 (38 percent) provinces.

Crossbow use is most allowed in the Southeast, as all 11 states (100 percent) permit their use during at least part of both the firearms and archery seasons in at least some areas of the state. The Midwest restricts crossbow use more than other regions, but even there 7 of 13 states (54 percent) allow them during firearms season and 4 of 13 states (31 percent) allow them during archery. It's important to note a "yes" in the accompanying chart does not mean crossbows are allowed for all hunters in the entire state/province during the entire season. It simply means they are allowed for the majority of hunters in at least some part of the state/province for at least some part of the season. Some states/provinces allow them throughout while others restrict their use.



Emma Wood, age 11, of Georgia took her first deer ever with a crossbow. She and her dad, Donnie, pose for a photo with Emma's Georgia doe, taken in fall 2011.

We also surveyed state/provincial agencies on the number of crossbow hunters they had and/or licenses they issued in 2000, 2005 and 2010. The vast majority of agencies did not require a specific crossbow license and therefore could not estimate the number of crossbow hunters in their jurisdiction.

### QDMA's Recommendations

The QDMA is dedicated to ensuring the future of white-tailed deer, wildlife habitat and our hunting heritage. As such, we are more interested in managing deer and habitat appropriately and protecting our hunting heritage than debating use of specific weapons. If the use of crossbows positively impacts a deer management program and helps recruit and retain more hunters, then we fully support their use.

## Crossbow Regulations

States/provinces where crossbows are allowed for all hunters during the **firearms** and **archery** seasons are indicated below by red dots. (Note: this information should not be used as a substitution of your state laws regarding crossbows. Check your state or provincial regulations to determine the exact season dates, wildlife management units, and/or counties for legality).

| State/Province   | Firearms | Archery |
|------------------|----------|---------|
| Alabama          | •        | •       |
| Arkansas         | •        | •       |
| Florida          | •        | •       |
| Georgia          | •        | •       |
| Louisiana        | •        | •       |
| Mississippi      | •        | •       |
| North Carolina   | •        | •       |
| Oklahoma         | •        | •       |
| South Carolina   | •        | •       |
| Tennessee        | •        | •       |
| Texas            | •        | •       |
| Connecticut      |          | •       |
| Delaware         | •        | •       |
| Maine            | •        |         |
| Maryland         | •        | •       |
| Massachusetts    |          |         |
| New Hampshire    | •        |         |
| New Jersey       | •        | •       |
| New York         | •        |         |
| Pennsylvania     | •        | •       |
| Rhode Island     | •        |         |
| Vermont          |          |         |
| Virginia         | •        | •       |
| West Virginia    |          |         |
| Illinois         |          |         |
| Indiana          |          | •       |
| Iowa             |          |         |
| Kansas           | •        |         |
| Kentucky         | •        |         |
| Michigan         | •        | •       |
| Minnesota        |          |         |
| Missouri         | •        |         |
| Nebraska         | •        | •       |
| North Dakota     | •        |         |
| Ohio             | •        | •       |
| South Dakota     |          |         |
| Wisconsin        |          |         |
| Arizona          | •        |         |
| California       | •        |         |
| Colorado         | •        |         |
| Idaho            | •        |         |
| Montana          | •        |         |
| Nevada           | •        |         |
| New Mexico       | •        |         |
| Oregon           |          |         |
| Utah             |          |         |
| Washington       |          |         |
| Wyoming          | •        | •       |
| Alberta          | •        |         |
| British Columbia | •        | •       |
| Manitoba         | •        |         |
| New Brunswick    | •        |         |
| Nova Scotia      | •        |         |
| Ontario          | •        | •       |
| Quebec           | •        | •       |
| Saskatchewan     | •        |         |

## COYOTE IMPACTS AND HUNTING OPPORTUNITY

Predators are a hot topic for deer hunters and managers throughout much of the whitetail's range. Black bears, wolves and bobcats each take their share of deer, but coyotes are receiving the lion's share of attention. Several recent research projects in the southeastern U.S. have shown significant impacts on fawn survival and recruitment rates (see the 2011 Whitetail Report). Many hunters express concern over coyote predation of deer and share their desire to increase hunter harvest of coyotes. Therefore, we surveyed state and provincial wildlife agencies to assess current coyote hunting opportunities, how these opportunities have changed in the past five years, and whether the agency's deer population model or management program has changed in the past five years in response to predator impacts.

Numerous states (28 of 38; 74 percent) and three of seven provinces (43 percent) allowed coyote hunting 365 days a year (note: Saskatchewan allowed year-round hunting outside Fur Conservation Areas and 152 days inside those areas). All three (100 percent) western states that provided data allowed coyote hunting 365 days. Ten of 11 (91 percent) Southeast states allowed coyote hunting 365 days, as did 10 of 13 (77 percent) Midwest states, but only five of 11 (45 percent) Northeast states. Two other northeastern states (Maine and Maryland) allowed coyote hunting year-round except on Sundays. Only Delaware reported not allowing coyote hunting.

These long coyote seasons are not new, as only one province (Manitoba), one northeastern state (New Jersey), and one southeastern state (South Carolina) had



LISA DENNIS

Several recent research projects in the southeastern U.S. have shown the potential for significant impacts on fawn survival and recruitment by coyotes and other predators.

### Coyote Regulations

We asked wildlife agencies how many days of coyote-hunting opportunity their state or province allows annually (**Days** in this chart), whether this opportunity has increased in the past five years (**Increased?**) and whether the agency's management model has changed in the last five years in response to predator impacts (**Model Changed?**).

| State/Province   | Days | Increased? | Model Changed? |
|------------------|------|------------|----------------|
| <b>Southeast</b> |      |            |                |
| Alabama          | 365  | N          | N              |
| Arkansas         | 332  | N          | N              |
| Florida          | 365  | N          | N              |
| Georgia          | 365  | N          | N              |
| Louisiana        | 365  | N          | N              |
| Mississippi      | 365  | N          | N              |
| North Carolina   | 365  | N          | N              |
| Oklahoma         | 365  | N          | N              |
| South Carolina   | 365  | Y          | Y              |
| Tennessee        | 365  | N          | N              |
| Texas            | 365  | N          | N              |
| <b>Northeast</b> |      |            |                |
| Connecticut      | 327  | N          | N              |
| Delaware         | 0    | N          | N              |
| Maine            | 313  | N          | Y              |
| Maryland         | 313  | N          | N              |
| Massachusetts    | *    | *          | *              |
| New Hampshire    | 365  | N          | N              |
| New Jersey       | 135  | Y          | N              |
| New York         | 179  | N          | N              |
| Pennsylvania     | 365  | N          | Y              |
| Rhode Island     | 365  | N          | N              |
| Vermont          | 365  | N          | N              |
| Virginia         | 365  | N          | N              |
| West Virginia    | *    | *          | *              |

| State/Province      | Days    | Increased? | Model Changed? |
|---------------------|---------|------------|----------------|
| <b>Midwest</b>      |         |            |                |
| Illinois            | 365     | N          | N              |
| Indiana             | 151     | N          | N              |
| Iowa                | 365     | N          | N              |
| Kansas              | 365     | N          | N              |
| Kentucky            | 365     | N          | N              |
| Michigan            | 275     | N          | N              |
| Minnesota           | 365     | N          | N              |
| Missouri            | 327     | N          | N              |
| Nebraska            | 365     | N          | N              |
| North Dakota        | 365     | N          | Y              |
| Ohio                | 365     | N          | N              |
| South Dakota        | 365     | N          | Y              |
| Wisconsin           | 365     | N          | N              |
| <b>West</b>         |         |            |                |
| Arizona             | *       | *          | *              |
| California          | 365     | N          | N              |
| Colorado            | *       | *          | *              |
| Idaho               | 365     | N          | N              |
| Montana             | *       | *          | *              |
| Nevada              | *       | *          | *              |
| New Mexico          | *       | *          | *              |
| Oregon              | *       | *          | *              |
| Utah                | *       | *          | *              |
| Washington          | *       | *          | *              |
| Wyoming             | 365     | N          | N              |
| <b>Canada</b>       |         |            |                |
| Alberta             | *       | *          | *              |
| British Columbia    | 210     | N          | N              |
| Manitoba            | 215     | Y          | Y              |
| New Brunswick       | 365     | N          | N              |
| Nova Scotia         | 313     | N          | N              |
| Ontario             | 365     | N          | N              |
| Quebec              | 150     | N          | N              |
| Saskatchewan        | 365/152 | N          | N              |
| * data not provided |         |            |                |



increased the length of the coyote hunting season in the past 5 years. Manitoba, Maine, North Dakota, Pennsylvania, South Carolina and South Dakota have altered their deer population models and/or management programs in response to predation. Some changes include altering monitoring programs for fawn survival and recruitment, establishing predator control working groups, setting new harvest objectives for management units, and reducing target antlerless harvests.

### QDMA's Recommendations

Predators, and especially coyotes, have successfully invaded all areas of the white-tail's range, assuring that they'll be an annual variable in deer management programs throughout North America for at least the foreseeable future. Whether rural or urban and North or South, coyotes are now part

of the dynamic relationship between deer and the environment. Coyotes can affect deer herds positively or negatively, so their presence can't be summed with a broad generalization. Their actual impacts will need to be measured and monitored, and deer seasons and bag limits can be adjusted where necessary. The important thing is to realize they are now a player in many deer management programs, and as managers, we need to acknowledge them as such.

From a predator control perspective, most sportsmen and women already have extremely liberal seasons to harvests coyotes. Given coyotes' high reproductive potential and ability to avoid humans, it is unlikely that hunting will sufficiently reduce coyote numbers in most situations. If deer managers are interested in reducing coyote populations, aggressive trapping programs will be required.

## FAWN RECRUITMENT RATES

The fawn recruitment rate is one of the most important measures of herd productivity, and it directly impacts the number of antlerless deer that can be harvested annually as well as the number of bucks you can realistically expect to have available for harvest. It also alerts managers to potential problems such as high fawn predation rates. The fawn recruitment rate is a measure of the number of fawns per adult doe (1.5 years and older) alive in the fall pre-hunt population. Basically, this index

records the number of fawns that survive to approximately six months of age and expresses that number in relation to the number of adult does in the population. The fawn recruitment rate is lower than the number of fetuses per doe and the number of fawns born in the spring, since not all fetuses survive to become fawns and not all fawns survive until fall. Many hunters feel the fawn recruitment rate is higher than it actually is because they assume

all adult does have twin fawns each year; many may give birth to twins but the actual recruitment rate is far less than two fawns per adult doe.

We surveyed all state and provincial wildlife agencies that manage white-tailed deer and asked them to provide their estimated fawn recruitment rate for 2000, 2005 and 2010. Our goal was to compare regional fawn recruitment rates and see if/how the average recruitment rates changed during the past decade. This analysis is especially timely given the recent expansion of coyote and other predator populations.

In the U.S., the average fawn recruitment rate declined significantly from 2000 to 2005 and again from 2005 to 2010. It is noteworthy that we conducted a similar agency survey in 2009 and states reported an average fawn recruitment rate of 0.88 fawns per adult doe in 1998. In 2000 each adult doe recruited approximately 0.81 fawns and that number dropped to 0.66

*In the U.S., the average fawn recruitment rate declined significantly from 2000 to 2005 and again from 2005 to 2010. On average it took two does to recruit three fawns in 2010!*

## Fawn Recruitment Rates Around North America

| State/Province           | Average Fawns Per Doe |             |             |
|--------------------------|-----------------------|-------------|-------------|
|                          | 2000                  | 2005        | 2010        |
| Illinois                 | 0.79                  | 0.65        | 0.55        |
| Indiana                  | *                     | *           | *           |
| Iowa                     | *                     | *           | 1.30        |
| Kansas                   | *                     | 0.71        | 0.64        |
| Kentucky                 | *                     | *           | *           |
| Michigan                 | 0.57                  | 0.53        | 0.39        |
| Minnesota                | *                     | *           | *           |
| Missouri                 | *                     | *           | *           |
| Nebraska                 | *                     | *           | *           |
| North Dakota             | *                     | *           | *           |
| Ohio                     | 1.00                  | 0.84        | 0.81        |
| South Dakota             | *                     | *           | 0.95        |
| Wisconsin                | 1.06                  | 1.07        | 1.07        |
| <b>Midwest Average</b>   | <b>0.86</b>           | <b>0.76</b> | <b>0.82</b> |
| Connecticut              | *                     | *           | 0.50        |
| Delaware                 | *                     | *           | *           |
| Maine                    | 0.91                  | 0.81        | 0.75        |
| Maryland                 | 0.74                  | 0.68        | 0.60        |
| Massachusetts            | *                     | *           | *           |
| New Hampshire            | 0.70                  | 0.68        | 0.63        |
| New Jersey               | *                     | (1.30)      | (1.70)      |
| New York                 | *                     | *           | *           |
| Pennsylvania             | 0.70                  | 0.70        | 0.70        |
| Rhode Island             | *                     | *           | 0.40        |
| Vermont                  | *                     | *           | *           |
| Virginia                 | 0.42                  | 0.47        | 0.44        |
| West Virginia            | *                     | *           | *           |
| <b>Northeast Average</b> | <b>0.69</b>           | <b>0.67</b> | <b>0.57</b> |
| Alabama                  | *                     | *           | *           |
| Arkansas                 | *                     | *           | *           |
| Florida                  | *                     | *           | *           |
| Georgia                  | 0.71                  | 0.37        | 0.52        |
| Louisiana                | 0.74                  | 0.60        | 0.58        |
| Mississippi              | *                     | 0.60        | 0.47        |
| North Carolina           | *                     | *           | *           |
| Oklahoma                 | *                     | *           | *           |
| South Carolina           | 1.23                  | 1.09        | 0.88        |
| Tennessee                | *                     | *           | *           |
| Texas                    | *                     | 0.54        | 0.53        |
| <b>Southeast Average</b> | <b>0.89</b>           | <b>0.64</b> | <b>0.60</b> |
| <b>3-Region Average</b>  | <b>0.81</b>           | <b>0.69</b> | <b>0.66</b> |
| Arizona                  | *                     | *           | *           |
| California               | *                     | *           | *           |
| Colorado                 | *                     | *           | *           |
| Idaho                    | *                     | *           | *           |
| Montana                  | *                     | *           | *           |
| Nevada                   | *                     | *           | *           |
| New Mexico               | *                     | *           | *           |
| Oregon                   | *                     | *           | *           |
| Utah                     | *                     | *           | *           |
| Washington               | *                     | *           | *           |
| Wyoming                  | *                     | *           | *           |
| <b>West Average</b>      |                       |             |             |
| Alberta                  | *                     | *           | *           |
| British Columbia         | *                     | *           | *           |
| Manitoba                 | *                     | *           | *           |
| New Brunswick            | 0.90                  | 0.94        | 1.16        |
| Nova Scotia              | 1.41                  | 1.53        | 1.58        |
| Ontario                  | *                     | *           | *           |
| Quebec                   | *                     | *           | *           |
| Saskatchewan             | 0.91                  | 0.91        | 0.76        |
| <b>Canada Average</b>    | <b>1.07</b>           | <b>1.13</b> | <b>1.17</b> |

\* data not available/provided



fawns in 2010. This means that on average it took 3 does to recruit 2 fawns in 2010!

Midwestern states had the highest fawn recruitment rate in the U.S. by averaging 0.82 fawns per adult doe in 2010. This ranged from 0.39 in Michigan to 1.30 in Iowa. Notably, only Iowa and Wisconsin averaged more than one fawn per adult doe. Interestingly, four of five states that provided data for at least two of the three requested years experienced reduced recruitment rates from 2000 to 2005 and again from 2005 to 2010.

In the Northeast in 2010, Maine had the highest fawn recruitment rate (0.75), followed by Pennsylvania (0.70) and New Hampshire (0.63). New Jersey reported data that was more than twice Maine's rate (1.70), but New Jersey's deer project leader explained this recruitment rate was representative of the Garden State's most productive deer herds rather than the statewide average. Therefore, we included this data in the table but did not include it in the Northeast or Three-Region Averages. The 2010 mean recruitment rate was 0.57 and ranged from 0.40 in Rhode Island to 0.75 in Maine.

Three of five states (Maine, Maryland, New Hampshire) that provided data for all three requested years experienced reduced recruitment rates from 2000 to

## Top-5 States 2010 Fawn Recruitment Rates

| State          | Fawns per Adult Doe |
|----------------|---------------------|
| Iowa           | 1.30                |
| Wisconsin      | 1.07                |
| South Dakota   | 0.95                |
| South Carolina | 0.88                |
| Ohio           | 0.81                |

2005 and again from 2005 to 2010. One state's (Pennsylvania) rate remained consistent across the three years, and one state's (Virginia) rate increased from 2000 to 2005 and then declined from 2005 to

*QDMA encourages all deer managers to collect fall/winter observation and harvest data to estimate the fawn recruitment rate. This statistic should be estimated annually and compared across years to identify changes in herd health and/or predation rates.*

2010. In total, the Northeast average fawn recruitment rate in 2010 was only 83 percent of what it was in 2000. In other words the average adult doe recruited 17 percent fewer fawns in 2010.

The average fawn recruitment rate in the Southeast was 0.60 fawns per adult doe in 2010, and it ranged from 0.47 in Mississippi to 0.88 in South Carolina. The Palmetto State was followed by Louisiana (0.58) and Texas (0.53). Four of five states that provided data for at least two years experienced reduced recruitment rates from 2000 to 2005 and again from 2005 to 2010. Georgia was the only state that did not follow this pattern as its recruitment rate dropped precipitously from 2000 to 2005 but increased from 2005 to 2010. It is noteworthy that even with the increase Georgia's 2010 value was still 27 percent below its 2000 value.

Contrary to most states, two of three Canadian provinces reported increased fawn recruitment rates from 2000 to 2005 and again from 2005 to 2010. Only Saskatchewan reported a reduced recruitment rate from 2005 to 2010. Overall, provincial averages were significantly higher than U.S. regional averages for all three years. Given the severe winters and short growing seasons faced by whitetails in much of Canada, these values were somewhat unexpected. However, it's important to note that many provincial deer herds are maintained at levels very close to being in balance with what the habitat can support both directly (via provincial management programs) and indirectly (via severe winter weather), and therefore can exhibit high health indices including fawn production and recruitment.

## QDMA's Recommendations

Surprisingly, several states and provinces do not estimate their fawn recruitment rate. Given the importance of this index, the QDMA encourages all deer managers (large and small, public and private) to collect fall/winter observation and harvest data to estimate the fawn recruitment rate. This statistic should be estimated annually and compared across years to identify changes in herd health and/or predation rates.



MIKE GRANDJEY

## LEGISLATION IMPACTING DEER HUNTING

The “A” in QDMA’s REACH program stands for advocacy. The QDMA’s Education and Outreach staff serve as liaisons between QDMA members/Branches and their respective state, federal, and provincial agencies and legislators. Since 2006 QDMA has engaged in approximately 350 legislative and management issues in nearly every whitetail state and province. Supporting good and opposing bad bills is only part of QDMA’s advocacy work, but it is an extremely important part given the increasing frequency of bills that would have a significant negative impact on deer management programs and the future of hunting.

To gauge legislative activity in 2011 we asked all state and provincial wildlife agencies for the number of legislative bills proposed in 2011 that would have directly impacted deer management and/or hunting.

**Western states and Canada** had the fewest proposed bills. Three western states provided data for this question, and all answered zero. However, there could be some subjectivity in the question’s wording as Idaho answered zero bills but passed Families Afield legislation (House Bill 85) in March to allow the state’s Fish and Game Commission to establish a mentored hunting program (hopefully directly impacting Idaho’s deer management program). In Canada five of six (83 percent) provinces reported zero bills in 2011. Only Manitoba reported any legislative activity.

**The Midwest** averaged two bills and ranged from zero in Kentucky, Nebraska, Ohio and South Dakota to seven in

Michigan and five to 10 in Iowa. Overall, activity was light in the Midwest as 7 of 12 states (58 percent) proposed fewer than 2 bills. Don’t let the small number fool you though as some would have been extremely troubling for whitetails and other wildlife. For example, Missouri House Bill 115 and Senate Bill 209 would have held sportsmen and women financially responsible for any damage caused by elk to a person’s property or for damage caused to vehicles. Additionally, the bills would have taken away the state’s management authority of wild elk by allowing anyone to kill an elk that had caused damage to their property, even if the damage was minimal.

**The Northeast** averaged the most bills (seven per state) and ranged from one in New Jersey to 13 in New York and 21 to 30 in Maine. Six of 11 states (55 percent) had five or more bills. In the Northeast, the Virginia legislature won the “bad bill” award for Senate Bill 868. This bill was very similar to the Missouri bills mentioned above in that it would have required the Department of Game and Inland Fisheries to issue a permit to any person claiming that deer, elk, or bear were causing agricultural damage. Under the bill, simply claiming that these animals were harming agriculture would allow a person to kill large numbers of deer, elk, or bear outside of established seasons,

*The Virginia legislature won the “bad bill” award for Senate Bill 868. Under the bill, simply claiming that deer, elk or bears were harming agriculture would allow a person to kill large numbers of these game animals outside of established seasons, without any restrictions on the method of take, and during any time of day or night.*

without any restrictions on the method of take, and during any time of day or night. Fortunately, the bill failed.

**The Southeast** averaged four bills per state and ranged from zero in Arkansas and Florida to 17 in Texas. Region wide, legislative activity was light as seven of 11 states (64 percent) proposed fewer than two bills. Tennessee was the unchallenged winner of the “bad bill” award throughout the Southeast with the White-tailed Deer Breeding and Farming Act (House Bill 112 and Senate Bill 1568). According to the proposed bills, anyone with captive deer could do virtually anything they wanted to with them and at any time, including slaughtering, selling, transporting, and farming them. Fortunately, common sense prevailed and the bills were defeated.

### QDMA’s Recommendations

The QDMA’s Education and Outreach staff learn about many proposed bills from members and professional colleagues. The QDMA encourages its members and colleagues to notify us of pending legislation so our staff can get engaged on the issue and take appropriate measures to support or oppose the proposed legislation.

### 2011 Legislation

| State/Province           | Bills        |
|--------------------------|--------------|
| Illinois                 | *            |
| Indiana                  | 1            |
| Iowa                     | 5 to 10      |
| Kansas                   | 1            |
| Kentucky                 | 0            |
| Michigan                 | 7            |
| Minnesota                | 1            |
| Missouri                 | 2            |
| Nebraska                 | 0            |
| North Dakota             | 2            |
| Ohio                     | 0            |
| South Dakota             | 0            |
| Wisconsin                | 2            |
| <b>Midwest Average</b>   | <b>2</b>     |
| Connecticut              | 2 to 6       |
| Delaware                 | 6            |
| Maine                    | 21 to 30     |
| Maryland                 | 7            |
| Massachusetts            | *            |
| New Hampshire            | 3            |
| New Jersey               | 1            |
| New York                 | 13           |
| Pennsylvania             | 5            |
| Rhode Island             | 2            |
| Vermont                  | 2            |
| Virginia                 | 5            |
| West Virginia            | *            |
| <b>Northeast Average</b> | <b>7</b>     |
| Alabama                  | 1            |
| Arkansas                 | 0            |
| Florida                  | 0            |
| Georgia                  | 1            |
| Louisiana                | 1            |
| Mississippi              | 1            |
| North Carolina           | 1            |
| Oklahoma                 | 6            |
| South Carolina           | 4            |
| Tennessee                | 7            |
| Texas                    | 17           |
| <b>Southeast Average</b> | <b>4</b>     |
| Arizona                  | *            |
| California               | 0            |
| Colorado                 | *            |
| Idaho                    | 0            |
| Montana                  | *            |
| Nevada                   | *            |
| New Mexico               | *            |
| Oregon                   | *            |
| Utah                     | *            |
| Washington               | *            |
| Wyoming                  | 0            |
| <b>West Average</b>      | <b>0</b>     |
| Alberta                  | *            |
| British Columbia         | *            |
| Manitoba                 | 2            |
| New Brunswick            | 0            |
| Nova Scotia              | 0            |
| Ontario                  | 0            |
| Quebec                   | 0            |
| Saskatchewan             | 0            |
| <b>Canada Average</b>    | <b>&lt;1</b> |

\* data not provided



## THE EVER-CHANGING FARM BILL

Farm Bills have the tendency to be highly controversial and can impact international trade, environmental preservation, food safety, and the well-being of rural communities. Consequently, each Bill's agricultural subsidy programs often become the subject of intense debate throughout the United States, and internationally as well.

### The Scope of Each New Farm Bill Reflects Changing Demands

According to the Congressional Research Service, ten Bills between 1965 and 2008 are generally agreed to be "Farm Bills." The first was the Food and Agricultural Act of 1965. Every five years or so thereafter, the United States Congress typically passes an updated version of this comprehensive omnibus bill, and each bears a particular name reflecting the focus of interest and attention at the time. For example, in 2002 it was called the Farm Security and Rural Investment Act of 2002. The 2007 Farm Bill turned into the 2008

Farm Bill before it was finally passed on June 8, 2008. This Bill is known as the Food Conservation and Energy Act of 2008.

The Farm Bill deals with both agriculture and all other affairs under the purview of the U.S. Department of Agriculture. Usually, each new Bill re-authorizes, amends, or repeals provisions of temporary agricultural acts, and puts forth new provisions for a limited time into the future.

Beginning in 1973, Farm Bills have included Titles on commodity programs, trade, rural development, farm credit, conservation, agricultural research, marketing, food and nutrition programs, including food stamps, and many others. By 2002 the Farm Bill contained 10 Titles, and five additional Titles were added to the 2008 Farm Bill.

### The Farm Bill's Conservation Initiatives

Most sportsmen and women are familiar only with the programs within the Conservation Title, such as the

*The current bill also includes economic incentives for production of biofuels, ultimately giving priority to farmers involved in biomass production. This move could compromise wildlife and conservation gains from CRP since its inception over 25 years ago.*

Conservation Reserve Program (CRP), Wetlands Reserve Program (WRP), Environmental Quality Incentive Program (EQIP), Wildlife Habitat Incentive Program (WHIP), and the Conservation Stewardship Program (CSP). There are, of course, many other conservation-related programs within the Conservation Title.

Within the current 2008 Farm Bill, conservation provisions emphasize and expand working land conservation and environmental practices, including the newest adaptation of the CSP, which redesigns and expands the previous Conservation Security Program. Wetland restoration and farmland preservation programs continue, as do land retirement programs, although at reduced funding levels. The Credit Title adds new conservation loans, and the Forestry Title includes provisions for emergency private forest restoration.

The Conservation Reserve Program has proven valuable to wildlife since it first appeared in the 1985 Farm Bill. The CRP has been one of America's most successful conservation programs, having saved 450 tons of topsoil annually and protected 170,000 miles of streams. Basically, CRP reduces soil erosion, improves water quality, and benefits a myriad of wildlife species and their habitat across the United States.

The CRP area in previous legislation was capped at 39.2 million acres. As of April 2008, total enrollment was 34.7 million acres. The 2008 Farm Bill authorizes the program through fiscal year (FY) 2012. However, the CRP area was capped



Most sportsmen and women are familiar with the Farm Bill through one of the programs within the Conservation Title, such as the Conservation Reserve Program (CRP) and Wildlife Habitat Incentive Program (WHIP). These cost-share programs have enabled wildlife managers to conserve soil and water while enhancing wildlife habitat through projects like the native warm-season grasses in this field.



at 32 million acres, an 18 percent reduction, on October 1, 2009; an example of compromise or potential redistribution of funding. The current bill also includes economic incentives for production of bio-fuels, ultimately giving priority to farmers involved in biomass production. This move could compromise wildlife and conservation gains from CRP since its inception over 25 years ago.

Luckily, compared with the 2002 Farm Bill, the 2008 Farm Bill allows for tree plantings, windbreaks, shelterbelts, and wildlife corridors and permits cost-share payments for forest thinning to improve conditions of resources on the land. The 2008 Farm Bill authorizes \$100 million in funding for FYs 2009-2012 for these cost-share payments.

Previous legislation capped the WRP area at 2.275 million acres. Through FY 2007, 1.9 million acres were enrolled. The 2008 Farm Bill raised the WRP area cap to 3.0 million acres through 2012. Other conservation programs receiving a financial upgrade included EQIP, WHIP, and CSP. Congress increased funding for EQIP from \$4.9 billion in FYs 2002-2007 to \$7.3 billion for FYs 2008-2012. Funding for WHIP more than doubled from \$42.6 million/year in FYs 2002-2007 to \$85 million/year through FY 2012. Finally, the CSP was approved for an enrollment of 12.77 million acres/year at an average cost of \$18/acre/year for FYs 2009-2012. This marked a substantial funding increase from the previous Farm Bill.

### The Farm Bill, Its Impact on Deer and Wildlife-Related Economics

The Farm Bill involves the protection and management of literally millions of acres of habitat for white-tailed deer, upland game birds, waterfowl, and countless other wildlife species, including rare and endangered animals and plants. The importance of hunting to the nation's economy should be a critical consideration during the eminent reduction in federal spending. In 2006, American hunters spent nearly \$25 billion on their favorite pastimes. Deer hunters alone contributed over half of the expenditures! The societal benefits of deer hunting are widespread and numerous and range from providing mil-

### Advocating for Wildlife

A combination of emerging factors influenced the contents and performance of the 2008 Farm Bill. Debt reduction and reduced federal spending, redistribution of limited funds, and the addition of categories (Titles) brought about significant changes in the 2008 Farm Bill. The groundwork in preparation of the 2008 Farm Bill marked a historic movement in American agricultural policy. New players and new partnerships shifted the debate in unprecedented ways, resulting in better programs and an increased focus on supporting the needs of producers and consumers. Among the list of new partnerships and players were the Theodore Roosevelt Conservation Partnership (TRCP) and the American Wildlife Conservation Partners (AWCP), representing nearly 40 conservation-minded organizations and millions of America's sportsmen and women. The QDMA is a proud member of the TRCP and AWCP advocacy groups.

lions of meals of organic meat for human consumption to reducing crop damage and the number of deer-vehicle collisions, to supporting rural economies throughout North America.

The effectiveness of conveying these messages to the non-hunting public and elected officials will directly affect support for hunting in the future, and hopefully the development of future Farm Bills with a strong conservation ethic.

### The 2008 Farm Bill Is Effective Until 2012

The time is quickly approaching to garner support for the 2012 Farm Bill. As before, the QDMA will partner with support groups to ensure the strength and performance of conservation-related matters in the forthcoming bill. The high priority policy objectives of the 2012 Farm Bill are as follows:

- Protect our farms and ranches.

- Strengthen conservation and stewardship efforts.
- Create a more responsive and resilient American food and agriculture system.

### QDMA's Recommendations

Our support of the conservation programs in the 2012 Farm Bill will be critical to fulfilling the QDMA's mission, and this will be accomplished most effectively through our membership in large-scale advocacy groups like the Theodore Roosevelt Conservation Partnership and the American Wildlife Conservation Partners. The QDMA encourages members to become more proactive in legislative matters that relate to conservation in general and specifically to white-tailed deer by expressing your concerns to elected officials at the local, state, and national levels. Considering the Nation's current financial climate, it is expected that the successor to the 2008 Farm Bill will likely display lower spending on farm/conservation programs.

Fortunately, of the four programs mentioned that most directly affect wildlife and wildlife habitat (i.e., CRP, EQIP, WHIP, and CSP); only CRP received reduced funding in the current Farm Bill. Also, the effect of reducing the cap on the enrollment area of CRP could be exacerbated by the introduction of incentives to farmers for producing biofuels. For over a quarter of a century throughout a major portion of the whitetail's range, deer hunting and CRP lands have been mentioned in the same breath. The primary reason is that

CRP lands, in general, provide important cover and early successional forage for whitetails. The fact that one program received less funding this time around should not cause undue alarm when considering the marked increase in funding for other conservation-related programs and the potential compensatory benefits to wildlife.

Obviously, the QDMA will continue its vigilance of legislative matters that directly or indirectly influence the white-tailed deer and those who pursue and manage this noble game animal.

*Fortunately, of the four programs mentioned that most directly affect wildlife and wildlife habitat (CRP, EQIP, WHIP, and CSP), only CRP received reduced funding in the current Farm Bill.*

## 2011 CORN, SOYBEAN, WHEAT AND COTTON PLANTINGS AND THEIR IMPACTS ON DEER

With commodity prices significantly higher in 2011 than the previous growing season, farmers in the United States and Canada planted 319.1 million and 70.5 million acres, respectively, last year across the 24 major crop varieties; a 2.5 million (0.8 percent) and 2.9 million acre (4.3 percent) increase from 2010, according to the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) and the Agriculture Division of Statistics Canada (ADSC).

Annual changes in the quantity and variety of commercially grown agriculture undoubtedly can impact the relative nutritional plane and body condition of white-tailed deer populations; particularly when discussing these fluctuations on a large scale, such as by county, Wildlife Management Unit, or even for an entire state or province. In fact, research has demonstrated measurable improvements in body weight and other physical parameters for resident deer herds even when only 1 percent of an area is planted in high-quality food plots; just imagine what all that rich, cultivated farmland offers them. On the other hand, when some of these crops are harvested, large open areas are left void of both food and cover for deer, at least temporarily. In addition, it stands to reason that when considerably more ground is planted than in years past, at least some of this increase in commercial crop acreages may come at the expense of wildlife cover. Therefore, to truly be a responsible steward, today's hunters and land managers must be skilled and able to determine whether a drastic increase in agricultural crops locally is likely to be a net benefit or liability for deer. To get started, let's look at four of the major cash crops planted across North America and discuss how they may have changed last year.

### Corn

According to NASS, an estimated 92.3 million acres of corn were planted in 2011. This was up 5 percent from 2010 (refer to the table on pages 24 and 25), and was the second highest planted acreage in the United States since 1944. Iowa continued to lead all states with 14.2 million acres (58 percent of all crops planted in Iowa),



*According to NASS, an estimated 92.3 million acres of corn were planted in 2011. This was up 5 percent from 2010, and was the second highest planted acreage in the United States since 1944.*

an 800,000-acre jump from 2010 and the second highest acreage on record for the Hawkeye state. Notable increases in acreage from 2010 also were reported in Nebraska (+850,000 acres), South Dakota (+650,000 acres) and Minnesota (+400,000 acres). Meanwhile, Texas and Indiana farmers planted 350,000 and 100,000 fewer acres than in 2010.

In Canada, the ADSC reported that farmers planted an estimated 3.4 million acres in corn for both grain and silage, a 108,000-acre decrease from 2010. Although almost all provinces planted less corn from the previous year, Manitoba saw the largest drop (-50,000 acres) and farmers in Ontario planted 45,000 less acres and realized lower overall production, the result of a 23.4 bushel per acre decline for that province.

### Soybeans

The 2011 United States soybean planted area was estimated by NASS at 75.2 million acres, down 3 percent from 2010. In addition, the total acreage planted decreased from the previous year in 21 of 31 states, and was the lowest since 2007. Although Iowa also led this category in total area (9.2 million acres), it experienced the largest decline (-600,000 acres)

of any state during 2011. Severe flooding along the upper and middle Mississippi River, Ohio River, and Missouri River, including events from both heavy snow-melt and spring rains, also caused drastic reductions for Nebraska (-400,000 acres), Kansas (-400,000 acres), Illinois (-200,000 acres) and Minnesota (-200,000 acres). Record high acreage was planted in North Dakota (4.2 million acres) and New York (285,000 acres), while a marked increase also occurred in Kentucky (+120,000 acres), Ohio (+100,000) and South Dakota (+100,000). At the national level, the ADSC reported the total soybean planted area in Canada increased 3 percent to 3.7 million acres from 2010 to 2011.

### Wheat

NASS estimated the total planted area of wheat in the United States at 56.4 million acres in 2011, up 5 percent from 2010. This included winter, Durum and other spring varieties of wheat. Kansas took the lead back in this category in 2011 with 8.8 million acres, planting 400,000 more acres than the previous year. Growers in North Dakota had planted more wheat than the Sunflower state for only the fourth time on record in 2010, but experienced an 840,000-acre decline last year due to historic flooding. Other notable increases in acreage occurred in Mississippi (+460,000 acres), Illinois (+430,000 acres), Arkansas (+410,000 acres) and Montana (+340,000 acres).

According to the ADSC, Canadian farmers planted 2.8 percent more area in wheat over the 2011 growing season, reaching a total of 21.6 million acres. Most of this growth can be attributed to large increases in Saskatchewan (+765,000 acres), Alberta (+365,000 acres) and Ontario (+245,000 acres).

### Cotton

The total planted area of cotton for 2011 was reported by NASS at 13.7 million acres, up an astounding 25 percent from the previous year and the highest level since 2006. This, following several years of reduced cotton production (the lowest since 1983, occurred in 2009 at 9.1 million acres), was a direct response to a dramatic

spike in cotton prices last March.

These increases were realized for every single state that grows the white, raw fiber product; the largest, at 1.5 million acres, was reported in Texas. Increases of more than 100,000 acres also were seen in North Carolina (+210,000 acres), Mississippi (+180,000 acres), California (+144,000 acres), Georgia (+120,000 acres), Alabama (+110,000 acres) and Arkansas (+105,000 acres).

#### Food vs. Cover

In general, more high-quality food for deer is good. However, when additional crops are planted in agriculturally-rich areas where cover for deer is already limited, the new plantings can negatively impact whitetails. Across the United States an additional 2.5 million acres were planted in 2011, but this was less than a 1 percent increase from 2010 and slightly less than the average planted in 2009. Alternatively, by reviewing the planting data in a regional format we begin to see a truer "picture" of the impacts.

**The Midwest** planted less soybeans (-1,560,000 acres) in 2011 than 2010, but farmers in this region planted more corn (+3,750,000 acres), wheat (+1,008,000 acres) and cotton (+47,000 acres). In total, the Midwest planted 647,000 more acres, and for a region that tends to lack cover more than food, the increase in agricultural plantings may have negatively impacted whitetail populations.

**The Northeast** planted more corn (+71,000 acres), wheat (+315,000 acres) and cotton (+32,000 acres), and a little less soybeans (-26,000 acres) in 2011. Next to the West, the Northeast plants the smallest percentage of total area in crops, but it had the largest percentage increase (0.5 percent) in planted area (+500,000 acres) from 2010 to 2011. In a region where high-quality food is often more limiting than cover, the increased corn and wheat production likely benefitted deer.

**The Southeast** planted more corn (+95,000 acres), a lot more wheat (+1,086,000 acres) and cotton (+2,452,000 acres), and a lot less soybeans (-610,000 acres). Total acreage planted in 2011 was 925,000 acres more than in 2010, and the

composition of crops was much different. Cotton provides few benefits to deer and whatever crop was replaced with cotton likely benefitted whitetails more.

**The West** planted more corn (+174,000 acres) and cotton (+220,000 acres) and a lot more wheat (+421,000 acres) in 2011 (soybeans are not a major crop in the West). Its regional average increased 30,000 total planted acres in 2011 which puts it 87,000 acres above its 2009 average. As stated above, cotton does not benefit deer, but the additional corn and wheat likely helped raise the nutritional plane across the West.

**Canada** planted less corn (-108,000 acres), more soybeans (+100,000 acres), and a lot more wheat (+588,000 acres) in 2011 (cotton is not a major crop in Canada). It is difficult to generalize for an entire country, but the increased acreage in soybeans and wheat likely benefitted whitetails across Canada.

#### QDMA's Recommendations

As hunters throughout the continent develop a more complete understanding of Quality Deer Management (QDM), the importance of habitat quality and availability becomes paramount. Of QDM's four Cornerstones, herd management is often the first that hunters gravitate to, but habitat management quickly grabs the attention of many QDM practitioners and frequently is one of the most satisfying aspects of a deer management program. This includes managing the forests, old fields, and cultivated areas, such as food plots. However, one thing that most recreational landowners and hunters don't have control over is the amount and type of commercial agricultural production in their area. Therefore, the QDMA encourages landowners and sportsmen and women to educate themselves as to both small and broad changes in the quantity and types of commercially grown agriculture nearby, before developing annual habitat prescriptions. In addition, the QDMA also recommends that both herd and habitat management planning is fully integrated with the most recent knowledge of local farming practices; only then can a comprehensive QDM program work to its fullest capability.

#### Top-5 States

##### Planted Area (% of State) in 2011

|              |                    |
|--------------|--------------------|
| Iowa         | 68.4% of the state |
| Illinois     | 61.4%              |
| Indiana      | 52.6%              |
| North Dakota | 44.0%              |
| Kansas       | 44.0%              |

#### Top-5 States

##### Total Planted Acres in 2011

|              |            |
|--------------|------------|
| Iowa         | 24,628,000 |
| Kansas       | 23,155,000 |
| Illinois     | 22,777,000 |
| Texas        | 22,155,000 |
| North Dakota | 19,924,000 |

#### Top-5 Corn States

##### 2011 Acreage

|           |            |
|-----------|------------|
| Iowa      | 14,200,000 |
| Illinois  | 12,500,000 |
| Nebraska  | 10,000,000 |
| Minnesota | 8,100,000  |
| Indiana   | 5,900,000  |

#### Top-5 Soybean States

##### 2011 Acreage

|           |           |
|-----------|-----------|
| Iowa      | 9,200,000 |
| Illinois  | 8,900,000 |
| Minnesota | 7,200,000 |
| Indiana   | 5,300,000 |
| Missouri  | 5,100,000 |

#### Top-5 Wheat States

##### 2011 Acreage

|              |           |
|--------------|-----------|
| Kansas       | 8,800,000 |
| North Dakota | 7,690,000 |
| Montana      | 5,780,000 |
| Texas        | 5,650,000 |
| Oklahoma     | 5,200,000 |

#### Top-5 Cotton States

##### 2011 Acreage

|                |           |
|----------------|-----------|
| Texas          | 7,115,000 |
| Georgia        | 1,450,000 |
| North Carolina | 760,000   |
| Arkansas       | 650,000   |
| Mississippi    | 600,000   |



| State/Province                   | Principal Crops Area Planted <sup>1</sup> |                |                | Percent of Total State/Province |             |             | CORN PLANTED  |             |               |             |              |
|----------------------------------|-------------------------------------------|----------------|----------------|---------------------------------|-------------|-------------|---------------|-------------|---------------|-------------|--------------|
|                                  | 2009 acres                                | 2010 acres     | 2011 acres     | 2009                            | 2010        | 2011        | 2010 acres    | %           | 2011 acres    | %           | Change       |
| Illinois                         | 22,945                                    | 22,716         | 22,777         | 61.9                            | 61.3        | 61.4        | 12,600        | 55.5        | 12,500        | 54.9        | -100         |
| Indiana                          | 12,155                                    | 12,190         | 12,270         | 52.1                            | 52.3        | 52.6        | 5,900         | 48.4        | 5,900         | 48.1        | 0            |
| Iowa                             | 24,648                                    | 24,595         | 24,628         | 68.4                            | 68.3        | 68.4        | 13,400        | 54.5        | 14,200        | 57.7        | 800          |
| Kansas                           | 22,669                                    | 22,729         | 23,155         | 43.0                            | 43.2        | 44.0        | 4,850         | 21.3        | 5,100         | 22.0        | 250          |
| Kentucky                         | 5,769                                     | 5,745          | 5,917          | 22.3                            | 22.2        | 22.9        | 1,340         | 23.3        | 1,440         | 24.3        | 100          |
| Michigan                         | 6,436                                     | 6,493          | 6,626          | 10.4                            | 10.5        | 10.7        | 2,400         | 37.0        | 2,550         | 38.5        | 150          |
| Minnesota                        | 19,595                                    | 19,823         | 19,756         | 35.2                            | 35.6        | 35.5        | 7,700         | 38.8        | 8,100         | 41.0        | 400          |
| Missouri                         | 13,556                                    | 13,140         | 13,553         | 30.4                            | 29.5        | 30.4        | 3,150         | 24.0        | 3,250         | 24.0        | 100          |
| Nebraska                         | 19,035                                    | 19,226         | 19,320         | 38.4                            | 38.8        | 39.0        | 9,150         | 47.6        | 10,000        | 51.8        | 850          |
| North Dakota                     | 21,583                                    | 21,496         | 19,924         | 47.7                            | 47.5        | 44.0        | 2,050         | 9.5         | 2,300         | 11.5        | 250          |
| Ohio                             | 10,021                                    | 10,010         | 10,254         | 34.9                            | 34.9        | 35.7        | 3,450         | 34.5        | 3,500         | 34.1        | 50           |
| South Dakota                     | 17,352                                    | 16,133         | 16,684         | 35.2                            | 32.7        | 33.8        | 4,550         | 28.2        | 5,200         | 31.2        | 650          |
| Wisconsin                        | 8,160                                     | 7,864          | 7,943          | 19.5                            | 18.8        | 18.9        | 3,900         | 49.6        | 4,150         | 52.2        | 250          |
| <b>Midwest Total/Average</b>     | <b>203,924</b>                            | <b>202,160</b> | <b>202,807</b> | <b>38.4</b>                     | <b>38.1</b> | <b>38.3</b> | <b>74,440</b> | <b>36.3</b> | <b>78,190</b> | <b>37.8</b> | <b>3,750</b> |
| Connecticut                      | 90                                        | 88             | 85             | 2.5                             | 2.5         | 2.4         | 26            | 29.5        | 26            | 30.6        | 0            |
| Delaware                         | 472                                       | 442            | 501            | 29.6                            | 27.7        | 31.5        | 180           | 40.7        | 190           | 37.9        | 10           |
| Maine                            | 281                                       | 267            | 266            | 1.2                             | 1.2         | 1.2         | 28            | 10.5        | 29            | 10.9        | 1            |
| Maryland                         | 1,452                                     | 1,412          | 1,537          | 18.3                            | 17.8        | 19.4        | 500           | 35.4        | 510           | 33.2        | 10           |
| Massachusetts                    | 102                                       | 99             | 101            | 1.5                             | 1.5         | 1.5         | 17            | 17.2        | 19            | 18.8        | 2            |
| New Hampshire                    | 72                                        | 71             | 73             | 1.2                             | 1.2         | 1.2         | 15            | 21.1        | 16            | 21.9        | 1            |
| New Jersey                       | 315                                       | 309            | 327            | 5.6                             | 5.5         | 5.9         | 80            | 25.9        | 90            | 27.5        | 10           |
| New York                         | 2,935                                     | 2,943          | 3,067          | 8.4                             | 8.4         | 8.8         | 1,050         | 35.7        | 1,040         | 33.9        | -10          |
| Pennsylvania                     | 3,728                                     | 3,703          | 3,686          | 12.6                            | 12.6        | 12.5        | 1,350         | 36.5        | 1,400         | 38.0        | 50           |
| Rhode Island                     | 10                                        | 11             | 11             | 1.0                             | 1.1         | 1.1         | 2             | 18.2        | 2             | 18.2        | 0            |
| Vermont                          | 281                                       | 287            | 285            | 4.6                             | 4.7         | 4.6         | 92            | 32.1        | 90            | 31.6        | -2           |
| Virginia                         | 2,671                                     | 2,774          | 2,957          | 9.8                             | 10.1        | 10.8        | 490           | 17.7        | 490           | 16.6        | 0            |
| West Virginia                    | 701                                       | 695            | 705            | 4.5                             | 4.5         | 4.5         | 48            | 6.9         | 47            | 6.7         | -1           |
| <b>Northeast Total/Average</b>   | <b>13,110</b>                             | <b>13,101</b>  | <b>13,601</b>  | <b>7.8</b>                      | <b>7.6</b>  | <b>8.1</b>  | <b>3,878</b>  | <b>25.2</b> | <b>3,949</b>  | <b>25.1</b> | <b>71</b>    |
| Alabama                          | 2,200                                     | 2,115          | 2,255          | 6.6                             | 6.3         | 6.7         | 270           | 12.8        | 270           | 12.0        | 0            |
| Arkansas                         | 7,751                                     | 7,646          | 7,791          | 22.8                            | 22.5        | 22.9        | 390           | 5.1         | 500           | 6.4         | 110          |
| Florida                          | 1,041                                     | 1,079          | 1,046          | 2.5                             | 2.6         | 2.5         | 60            | 5.6         | 65            | 6.2         | 5            |
| Georgia                          | 3,769                                     | 3,576          | 3,586          | 9.9                             | 9.4         | 9.4         | 295           | 8.2         | 365           | 10.2        | 70           |
| Louisiana                        | 3,410                                     | 3,412          | 3,500          | 10.3                            | 10.3        | 10.5        | 510           | 14.9        | 570           | 16.3        | 60           |
| Mississippi                      | 4,354                                     | 4,331          | 4,593          | 14.0                            | 14.0        | 14.8        | 750           | 17.3        | 860           | 18.7        | 110          |
| North Carolina                   | 4,925                                     | 4,736          | 4,925          | 14.3                            | 13.7        | 14.3        | 910           | 19.2        | 900           | 18.3        | -10          |
| Oklahoma                         | 10,562                                    | 10,335         | 10,030         | 23.6                            | 23.1        | 22.4        | 370           | 3.6         | 400           | 4.0         | 30           |
| South Carolina                   | 1,654                                     | 1,631          | 1,727          | 8.1                             | 8.0         | 8.4         | 350           | 21.5        | 360           | 20.8        | 10           |
| Tennessee                        | 4,907                                     | 4,797          | 4,944          | 18.2                            | 17.8        | 18.3        | 710           | 14.8        | 770           | 15.6        | 60           |
| Texas                            | 22,465                                    | 21,969         | 22,155         | 13.1                            | 12.8        | 12.9        | 2,300         | 10.5        | 1,950         | 8.8         | -350         |
| <b>Southeast Total/Average</b>   | <b>67,038</b>                             | <b>65,627</b>  | <b>66,552</b>  | <b>13.0</b>                     | <b>12.8</b> | <b>13.0</b> | <b>6,915</b>  | <b>12.1</b> | <b>7,010</b>  | <b>12.5</b> | <b>95</b>    |
| Arizona                          | 741                                       | 738            | 762            | 1.0                             | 1.0         | 1.0         | 45            | 6.1         | 45            | 5.9         | 0            |
| California                       | 4,153                                     | 4,205          | 4,492          | 4.0                             | 4.0         | 4.3         | 610           | 14.5        | 640           | 14.2        | 30           |
| Colorado                         | 6,061                                     | 6,247          | 6,190          | 9.1                             | 9.4         | 9.3         | 1,330         | 21.3        | 1,400         | 22.6        | 70           |
| Idaho                            | 4,329                                     | 4,371          | 4,356          | 8.1                             | 8.2         | 8.1         | 320           | 7.3         | 390           | 9.0         | 70           |
| Montana                          | 9,100                                     | 9,285          | 9,547          | 9.7                             | 9.9         | 10.1        | 80            | 0.9         | 75            | 0.8         | -5           |
| Nevada                           | 519                                       | 504            | 513            | 0.7                             | 0.7         | 0.7         | 4             | 0.8         | 8             | 1.6         | 4            |
| New Mexico                       | 1,045                                     | 1,091          | 1,040          | 1.3                             | 1.4         | 1.3         | 140           | 12.8        | 135           | 13.0        | -5           |
| Oregon                           | 2,124                                     | 2,224          | 2,202          | 3.4                             | 3.5         | 3.5         | 70            | 3.1         | 75            | 3.4         | 5            |
| Utah                             | 994                                       | 1,000          | 1,009          | 1.8                             | 1.8         | 1.9         | 70            | 7.0         | 75            | 7.4         | 5            |
| Washington                       | 3,600                                     | 3,701          | 3,730          | 7.9                             | 8.1         | 8.2         | 200           | 5.4         | 190           | 5.1         | -10          |
| Wyoming                          | 1,705                                     | 1,634          | 1,491          | 2.7                             | 2.6         | 2.4         | 90            | 5.5         | 100           | 6.7         | 10           |
| <b>West Total/Average</b>        | <b>34,371</b>                             | <b>35,000</b>  | <b>35,332</b>  | <b>4.5</b>                      | <b>4.6</b>  | <b>4.6</b>  | <b>2,959</b>  | <b>7.7</b>  | <b>3,133</b>  | <b>8.2</b>  | <b>174</b>   |
| <b>United States<sup>2</sup></b> | <b>319,250</b>                            | <b>316,694</b> | <b>319,147</b> | <b>15.9</b>                     | <b>15.8</b> | <b>15.9</b> | <b>88,192</b> | <b>27.8</b> | <b>92,282</b> | <b>28.9</b> | <b>4,090</b> |
| State/Province                   | Principal Crops Area Planted <sup>3</sup> |                |                | Percent of Total State/Province |             |             | CORN PLANTED  |             |               |             |              |
|                                  | 2009 acres                                | 2010 acres     | 2011 acres     | 2009                            | 2010        | 2011        | 2010 acres    | %           | 2011 acres    | %           | Change       |
| Alberta                          | n/a                                       | 19,455         | 19,565         | n/a                             | 11.9        | 12.0        |               |             |               |             |              |
| British Columbia                 | n/a                                       | 355            | 365            | n/a                             | 0.2         | 0.2         | 25            | 7           | 20            | 5           | -5           |
| Manitoba                         | n/a                                       | 9,325          | 9,405          | n/a                             | 5.8         | 5.9         | 240           | 3           | 190           | 2           | -50          |
| New Brunswick                    | n/a                                       | 77             | 73             | n/a                             | 0.4         | 0.4         | 13            | 17          | 11            | 14          | -3           |
| Nova Scotia                      | n/a                                       | 36             | 39             | n/a                             | 0.3         | 0.3         | 13            | 36          | 15            | 38          | 2            |
| Ontario                          | n/a                                       | 6,155          | 6,160          | n/a                             | 2.3         | 2.3         | 2,145         | 35          | 2,100         | 34          | -45          |
| Quebec                           | n/a                                       | 2,386          | 2,394          | n/a                             | 0.6         | 0.6         | 1,038         | 44          | 1,031         | 43          | -7           |
| Saskatchewan                     | n/a                                       | 37,805         | 37,860         | n/a                             | 23.5        | 23.5        |               |             |               |             |              |
| <b>Canada<sup>4</sup></b>        | <b>n/a</b>                                | <b>67,661</b>  | <b>70,556</b>  | <b>n/a</b>                      | <b>4.8</b>  | <b>5.1</b>  | <b>3,474</b>  | <b>5</b>    | <b>3,366</b>  | <b>5</b>    | <b>-108</b>  |

Acres are given in increments of 1,000.

% Shows the percent of the selected crop (corn, soybeans, wheat or cotton) as a portion of the total principal crops planted in that state or province.

<sup>1</sup> Principal crops (United States) include corn, sorghum, oats, barley, all wheat (winter, Durum, and other spring), rice, soybeans, peanuts, sunflowers, cotton, dry edible beans, potatoes, sugarbeets, and millet. Includes double cropped acres and unharvested small grains planted as cover crops.

<sup>2</sup> States totals do not add up to United States total due to various crops (canola and rye) acreage not included. Canola and rye included in United States total only.

| SOYBEANS PLANTED |             |               |             |               | WHEAT PLANTED |             |               |             |              | COTTON PLANTED |             |               |             |              |
|------------------|-------------|---------------|-------------|---------------|---------------|-------------|---------------|-------------|--------------|----------------|-------------|---------------|-------------|--------------|
| 2010 acres       | %           | 2011 acres    | %           | Change        | 2010 acres    | %           | 2011 acres    | %           | Change       | 2010 acres     | %           | 2011 acres    | %           | Change       |
| 9,100            | 40.1        | 8,900         | 39.1        | -200          | 330           | 1.5         | 760           | 3.3         | 430          |                |             |               |             |              |
| 5,350            | 43.9        | 5,300         | 43.2        | -50           | 250           | 2.1         | 420           | 3.4         | 170          |                |             |               |             |              |
| 9,800            | 39.8        | 9,200         | 37.4        | -600          | 15            | 0.1         | 23            | 0.1         | 8            |                |             |               |             |              |
| 4,300            | 18.9        | 3,900         | 16.8        | -400          | 8,400         | 37.0        | 8,800         | 38.0        | 400          | 51             | 0.2         | 68            | 0.3         | 17           |
| 1,400            | 24.4        | 1,520         | 25.7        | 120           | 390           | 6.8         | 530           | 9.0         | 140          |                |             |               |             |              |
| 2,050            | 31.6        | 1,950         | 29.4        | -100          | 530           | 8.2         | 700           | 10.6        | 170          |                |             |               |             |              |
| 7,400            | 37.3        | 7,200         | 36.4        | -200          | 1,665         | 8.4         | 1,640         | 8.3         | -25          |                |             |               |             |              |
| 5,150            | 39.2        | 5,100         | 37.6        | -50           | 370           | 2.8         | 830           | 6.1         | 460          | 310            | 2.4         | 340           | 2.5         | 30           |
| 5,150            | 26.8        | 4,750         | 24.6        | -400          | 1,600         | 8.3         | 1,500         | 7.8         | -100         |                |             |               |             |              |
| 4,100            | 19.1        | 4,200         | 21.1        | 100           | 8,530         | 39.7        | 7,690         | 38.6        | -840         |                |             |               |             |              |
| 4,600            | 46.0        | 4,700         | 45.8        | 100           | 780           | 7.8         | 890           | 8.7         | 110          |                |             |               |             |              |
| 4,200            | 26.0        | 4,300         | 25.8        | 100           | 2,815         | 17.4        | 2,810         | 16.8        | -5           |                |             |               |             |              |
| 1,640            | 20.9        | 1,660         | 20.9        | 20            | 240           | 3.1         | 330           | 4.2         | 90           |                |             |               |             |              |
| <b>64,240</b>    | <b>31.8</b> | <b>62,680</b> | <b>31.1</b> | <b>-1,560</b> | <b>25,915</b> | <b>11.0</b> | <b>26,923</b> | <b>11.9</b> | <b>1,008</b> | <b>361</b>     | <b>1.3</b>  | <b>408</b>    | <b>1.4</b>  | <b>47</b>    |
| 175              | 39.6        | 180           | 35.9        | 5             | 50            | 11.3        | 80            | 16.0        | 30           |                |             |               |             |              |
| 470              | 33.3        | 455           | 29.6        | -15           | 180           | 12.7        | 300           | 19.5        | 120          |                |             |               |             |              |
| 94               | 30.4        | 85            | 26.0        | -9            | 28            | 9.1         | 40            | 12.2        | 12           |                |             |               |             |              |
| 280              | 9.5         | 285           | 9.3         | 5             | 110           | 3.7         | 120           | 3.9         | 10           |                |             |               |             |              |
| 500              | 13.5        | 480           | 13.0        | -20           | 165           | 4.5         | 195           | 5.3         | 30           |                |             |               |             |              |
| 560              | 20.2        | 570           | 19.3        | 10            | 180           | 6.5         | 290           | 9.8         | 110          | 83             | 3.0         | 115           | 3.9         | 32           |
| 20               | 2.9         | 18            | 2.6         | -2            | 7             | 1.0         | 10            | 1.4         | 3            |                |             |               |             |              |
| <b>2,099</b>     | <b>21.3</b> | <b>2,073</b>  | <b>19.4</b> | <b>-26</b>    | <b>720</b>    | <b>7.0</b>  | <b>1,035</b>  | <b>9.7</b>  | <b>315</b>   | <b>83</b>      | <b>3.0</b>  | <b>115</b>    | <b>3.9</b>  | <b>32</b>    |
| 350              | 16.5        | 310           | 13.7        | -40           | 150           | 7.1         | 220           | 9.8         | 70           | 340            | 16.1        | 450           | 20.0        | 110          |
| 3,190            | 41.7        | 3,250         | 41.7        | 60            | 200           | 2.6         | 610           | 7.8         | 410          | 545            | 7.1         | 650           | 8.3         | 105          |
| 25               | 2.3         | 20            | 1.9         | -5            | 12            | 1.1         | 13            | 1.2         | 1            | 92             | 8.5         | 93            | 8.9         | 1            |
| 270              | 7.6         | 170           | 4.7         | -100          | 170           | 4.8         | 250           | 7.0         | 80           | 1,330          | 37.2        | 1,450         | 40.4        | 120          |
| 1,030            | 30.2        | 1,050         | 30.0        | 20            | 125           | 3.7         | 200           | 5.7         | 75           | 255            | 7.5         | 280           | 8.0         | 25           |
| 2,000            | 46.2        | 1,830         | 39.8        | -170          | 125           | 2.9         | 340           | 7.4         | 215          | 420            | 9.7         | 600           | 13.1        | 180          |
| 1,580            | 33.4        | 1,420         | 28.8        | -160          | 500           | 10.6        | 700           | 14.2        | 200          | 550            | 11.6        | 760           | 15.4        | 210          |
| 500              | 4.8         | 460           | 4.6         | -40           | 5,300         | 51.3        | 5,200         | 51.8        | -100         | 285            | 2.8         | 300           | 3.0         | 15           |
| 465              | 28.5        | 400           | 23.2        | -65           | 145           | 8.9         | 200           | 11.6        | 55           | 202            | 12.4        | 270           | 15.6        | 68           |
| 1,450            | 30.2        | 1,380         | 27.9        | -70           | 260           | 5.4         | 390           | 7.9         | 130          | 390            | 8.1         | 460           | 9.3         | 70           |
| 205              | 0.9         | 165           | 0.7         | -40           | 5,700         | 25.9        | 5,650         | 25.5        | -50          | 5,567          | 25.3        | 7,115         | 32.1        | 1,548        |
| <b>11,065</b>    | <b>22.0</b> | <b>10,455</b> | <b>19.7</b> | <b>-610</b>   | <b>12,687</b> | <b>11.3</b> | <b>13,773</b> | <b>13.6</b> | <b>1,086</b> | <b>9,976</b>   | <b>13.3</b> | <b>12,428</b> | <b>15.8</b> | <b>2,452</b> |
| 89               | 12.1        | 77            | 10.1        | -12           | 775           | 18.4        | 860           | 19.1        | 85           | 198            | 26.8        | 261           | 34.3        | 64           |
| 775              | 18.4        | 860           | 19.1        | 85            | 2,478         | 39.7        | 2,380         | 38.4        | -98          | 306            | 7.3         | 450           | 10.0        | 144          |
| 1,400            | 32.0        | 1,448         | 33.2        | 48            | 5,440         | 58.6        | 5,780         | 60.5        | 340          |                |             |               |             |              |
| 23               | 4.6         | 23            | 4.5         | 0             | 470           | 43.1        | 435           | 41.8        | -35          | 51             | 4.6         | 63            | 6.1         | 12           |
| 960              | 43.2        | 990           | 45.0        | 30            | 151           | 15.1        | 159           | 15.8        | 8            |                |             |               |             |              |
| 2,330            | 63.0        | 2,410         | 64.6        | 80            | 165           | 10.1        | 140           | 9.4         | -25          |                |             |               |             |              |
| <b>14,281</b>    | <b>30.9</b> | <b>14,702</b> | <b>31.1</b> | <b>421</b>    | <b>554</b>    | <b>12.9</b> | <b>774</b>    | <b>16.8</b> | <b>220</b>   |                |             |               |             |              |
| 77,404           | 24.4        | 75,208        | 23.6        | -2196         | 53,603        | 16.9        | 56,433        | 17.7        | 2,830        | 10,974         | 3.5         | 13,725        | 4.3         | 2,751        |
| 6,535            | 34          | 6,900         | 35          | 365           | 60            | 17          | 75            | 21          | 15           |                |             |               |             |              |
| 3,040            | 33          | 2,265         | 24          | -775          | 3             | 4           | 5             | 7           | 2            |                |             |               |             |              |
| 9                | 11          | 11            | 15          | 3             | 6             | 17          | 6             | 16          | 0            |                |             |               |             |              |
| 2,440            | 40          | 2,440         | 40          | 0             | 930           | 15          | 1,175         | 19          | 245          |                |             |               |             |              |
| 648              | 27          | 741           | 31          | 94            | 130           | 5           | 108           | 5           | -22          |                |             |               |             |              |
| 10,330           | 27          | 11,095        | 29          | 765           |               |             |               |             |              |                |             |               |             |              |
| 3,665            | 5           | 3,765         | 5           | 100           | 21,065        | 31          | 21,653        | 31          | 588          |                |             |               |             |              |

3 Principal crops (Canada) include corn for grain, fodder corn, oats, barley, all wheat (winter, Durum, and other spring), fall rye, flaxseed, canola, soybeans, and summerfallow, as well as dry edible beans and peas, mixed grain, sunflowers, lentils, mustard and canary seeds.

4 Provincial totals do not add up to Canada total due to various crops (dry edible beans and peas, mixed grain, sunflowers, lentils, mustard and canary seeds) acreage not included in Canada total, as well as Prince Edward Island being left out.

## 2011 HEMORRHAGIC DISEASE (HD) OUTBREAKS

During the summer of 2011, regional outbreaks of hemorrhagic disease (HD) in white-tailed deer herds stole the headlines throughout portions of the United States. This, occurring just four years after the HD epidemic in 2007, the worst year for the disease in at least 50 years, helped to affirm it as the most significant viral disease impacting whitetails annually.

HD is an infectious, blood-borne disease of deer and elk that is transmitted by biting midges or flies; it is caused by either of two closely related viruses, epizootic hemorrhagic disease (EHD) virus or bluetongue (BTV) virus. Since the symptoms and disease features produced by both of these viruses are relatively indistinguishable, the general term “HD” is often used. For additional information on the biology of HD, see pages 20 to 22 in QDMA’s 2009 Whitetail Report (available at QDMA.com).

According to the Southeastern Cooperative Wildlife Disease Study (SCWDS) and journalist Madeline Bodin of the State Wildlife Research News, by November 2011 at least 18 states (see the larger map on this page) had reported suspected cases of HD, with 13 positive states confirmed by SCWDS at the time of this report.

One mission of SCWDS is to support diagnostics related to EHD and BTV throughout the United States; for over 30 years state wildlife agencies have had the option of sending in samples to be tested, which helps local and state managers better understand the potential impacts HD has on whitetail populations. In fact, in an attempt to better define HD outbreaks and see if their prevalence has changed

over time, SCWDS has been working with the Centers for Epidemiology and Animal Health (CEAH), a division of USDA-APHIS, to map the distribution of each strain of the virus every year.

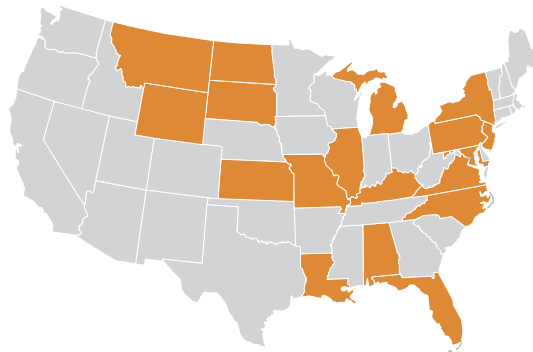
So, will the summer/fall of 2011 compare to the outbreak of 2007? SCWDS

eastern United States while several strains of BTV predominated in the western states.

In addition, according to SCWDS, there appears to be significant activity in a few specific regions of the country, namely in eastern Kansas, as well as eastern Pennsylvania, northern New Jersey and southeastern New York. Reports also state that Montana, North Dakota, South Dakota and Wyoming were hit very hard. In fact, the mortality was extensive enough in North Dakota that the Department of Game and Fish suspended sales of deer hunting licenses for three deer management units (DMUs) and offered refunds for 13,000 licenses sold to hunters in 11 DMUs in the western portion of the state.

The state of Michigan, an area outside the normal range of the disease, has also seen a rash of HD outbreaks in recent years. According to the Michigan Department of Natural Resources, HD was first documented in its white-tailed deer population in 1955. But, additional die-offs attributed to HD then occurred in 1974 (approximately 100 deer), 2006 (50 to 75 deer), 2008 (150 to 200 deer), 2009 (300 to 450 deer), 2010 (over 1,000 deer), and 2011 (2 deer confirmed so far by the Diagnostic Center for Population and Animal Health at Michigan State University).

States with Hemorrhagic Disease (HD) in 2011



HD Suspected/Confirmed in 2011



The smaller map above, created by the Southeastern Cooperative Wildlife Disease Study (SCWDS) at the University of Georgia, depicts nationwide distribution of HD in wild deer from 1980 to 2003.

received suspected or confirmed HD activity in 31 states in 2007, and estimated mortality rates of more than 100 deer per county in Illinois, Indiana, Kentucky, Missouri, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia; totaling overall mortality of greater than 65,000 deer. At this time, SCWDS has processed more than 100 samples, and will issue their full report on the 2011 outbreak in November 2012.

However, so far, one prominent aspect of their findings is that with only one exception (North Carolina, BTV-11) all 36 isolated strains from 2011 have been confirmed to be from a single form of EHD (EHDV-2). In most years, outbreaks are regional and disconnected across the continent. For example, during the 2007 outbreak EHD was found throughout the

### QDMA’s Recommendation

Since the disease is spread by insects, there is nothing we can do to prevent HD and outbreaks will end with the onset of cold weather. Even so, when Quality Deer Managers work diligently over multiple seasons to increase numbers of mature bucks and balance the sex ratio, finding even one mature buck or scores of dead antlerless deer that are victims of HD can be frustrating. Although HD’s impact on deer populations is minor on a nationwide scale, it can be locally severe especially in areas where the disease is relatively new. The QDMA recommends hunters who experience significant losses closely monitor population indicators to determine if reducing the local antlerless harvest will be necessary in future seasons.

*Deer mortality was extensive enough in North Dakota that the Department of Game and Fish suspended sales of deer hunting licenses for three DMUs and offered refunds in 11 DMUs in the western portion of the state.*



## INTERSTATE WILDLIFE VIOLATOR COMPACT

The Interstate Wildlife Violator Compact (IWVC) is an agreement that recognizes suspension of hunting, fishing, and trapping licenses in member states. Today, 36 states are members of the IWVC. This means that illegal activities in one of these states can affect a person's hunting or fishing privileges in all participating states. In other words, if a person's hunting, fishing, or trapping rights are suspended in their home state, they may be suspended in all member states as well. This cooperative interstate effort enhances the state wildlife agency's ability to protect and manage its wildlife resources. The purpose of the IWVC is quite simple. It alerts chronic and potential wildlife lawbreakers that their activities in one state can affect their privileges in all participating states.

Since 2008, Alabama, Pennsylvania, Texas, and West Virginia have joined the IWVC (see the map on this page). In addition, Arkansas, North Carolina, South Carolina, and Virginia have all passed the necessary legislation and will be the newest members of the Compact. Maine and Nebraska are currently involved in the legislative process of joining. There are only eight states that have not joined, and they are all situated in the Northeast, ranging from New Hampshire southward to Delaware.

### The IWVC Process

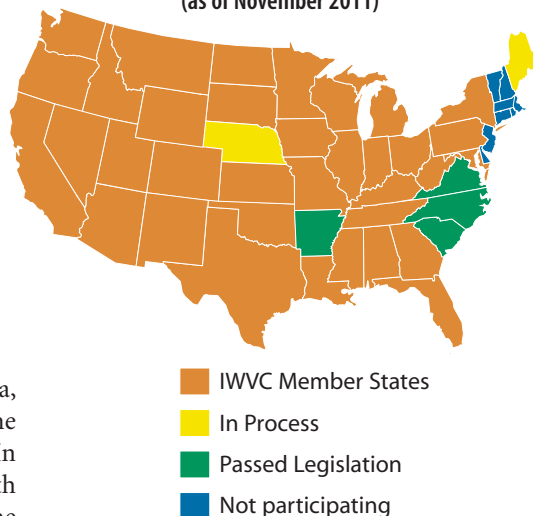
Importantly, the IWVC also establishes a process whereby wildlife law violations by a non-resident from a member state are handled as if the person were a resident, meaning they can be served a ticket rather than being arrested, booked, and bonded. This process is a convenience for hunters, fishermen, and trappers of member states, and increases efficiency of Wildlife Law Enforcement Officers by allowing more time for enforcement duties rather than violator processing procedures.

How effective is the IWVC? The IWVC has identified between 4,000 and 5,000 poachers and other game law violators whose hunting and fishing privileges have been revoked in Compact member states. The IWVC is critical to prevent out-of-

state poachers from keying on most other states when they lose their hunting privileges at home. Unfortunately, the states they will focus their attention on are those that are not Compact partners.

Prior to the establishment of the IWVC, one of the problems encountered

**Interstate Wildlife Violator Compact States**  
(as of November 2011)



by wildlife law enforcement officers is that they could not conduct a background check on someone who had committed a wildlife regulation violation. Now they can! Each Compact state member enters violator suspensions into the IWVC database. This database can be accessed by each participating state. Reports can be generated to show suspended violators by violator state or by the suspending agency state.

### QDMA's Recommendation

The QDMA recommends that all conscientious sportsmen and women participate in their state/provincial wildlife agency's wildlife regulation violation reporting program. Fortunately, every state/provincial wildlife agency has a program for reporting wildlife regulation violations. For example, the South Carolina Department of Natural Resources has an Operation Game Thief (OGT) program, and the Georgia Department of Natural Resources has the Turn in Poachers (TIP) program. A toll-free hot line number is available on each agency's website and appears on all printed materials and even

on hunting and fishing licenses.

The QDMA also encourages sportsmen and women to promote tougher fines and penalties for poaching and wildlife regulation violations in general. Inform your elected officials that poaching not only involves wildlife theft, it also poses a safety issue to those who participate legally in the activities of hunting and fishing.

Finally, the QDMA endorses the IWVC and encourages the remaining non-member states to join the Compact. Only then will our concerted efforts work to curtail the activities of poachers throughout the nation.

### Interstate Wildlife Violator Compact Benefits for the consumer:

Delays and/or the inconvenience involved with the processing of a violation are comparable for residents and non-residents of participating states.

Personal recognizance is permitted in many cases involving wildlife violations. Certain violations and circumstances still require an immediate appearance or bonding.

### Benefits for the state wildlife agency:

Wildlife law enforcement officers are able to devote more time to patrol, surveillance and apprehension of violators since they are not burdened with violator processing procedures.

The burden on courts and jail facilities is reduced because of the decreased case load involving immediate appearances, bonding and incarceration.

Public relations are improved by not having to subject as many violators to the inconveniences of immediate appearance, bonding, or incarceration.

The number of "Failure to Appear" cases is reduced because non-residents cannot ignore a citation from participating states without facing the suspension of their wildlife license privileges in their home states.

Wildlife law violators are put on notice that their activities in one state can affect their privilege to recreate in all participating states.

## THE BOOMING NATURAL GAS INDUSTRY (AND ITS IMPACTS ON WHITETAILS)

The natural gas industry has exploded in recent years. New drilling technologies and methods are allowing companies to extract natural gas from deep shale formations that were considered inaccessible only a few years ago. Numerous areas of shale gas resources, known as “plays,” are currently being drilled throughout the United States (see the map on the facing page). This gas boom is bringing rapid economic growth to many areas, and natural gas has reduced greenhouse gas emissions as compared to coal and oil. However, other elements of gas drilling are cause for concern and need to be closely monitored with regard to human and wildlife health.

The National Wildlife Federation’s 2011 report on drilling hazards provides an overview of unconventional gas drilling and the key concerns and potential threats that such drilling raises for America’s land, water, air and wildlife. It lists documented cases of fracking chemicals and methane contaminating underground water sources, forest clearing fragmenting habitats and leading to silt runoff, drilling accidents polluting streams and other water bodies, and fracking fluids being harmful or deadly to plants and animals. All industries have their share of accidents or issues, and the above clearly demonstrate the need for close monitoring and oversight to protect our wildlife resources. This article does not cover all aspects of gas drilling, nor does it debate the pros and cons of drilling. Rather, it touches on some of the larger issues with respect to white-tailed deer and other wildlife species.

### Fracking

High volume hydraulic fracturing, better known as “fracking,” allows the recovery of gas 6,000 to 10,000 feet below ground. Gas companies drill to this depth, turn the well horizontally to follow the shale layer for a mile or more, and then pump sand, chemicals and millions of gallons of water to fracture the shale and release the natural gas. The fracking process requires 2 to 8 million gallons of water per well! Thus, massive withdrawals of freshwater are required. This creates numerous issues with regard to maintaining adequate water levels for fish and wetlands species, as well as upland species and

humans. Also, since fracking requires the use of numerous chemicals, the water that comes back to the surface of each well contains those chemicals and may also contain heavy metals and/or radioactive materials. Hence, fracking is extremely controversial and generally the major issue with regard to natural gas drilling.

### Marcellus Shale

According to the Pennsylvania Energy Impacts Assessment, Marcellus is the largest gas-bearing shale formation in North America in both area and potential gas volume. It spans over 150,000 square miles across five states, including the southern

*QDMA is concerned that current federal, state and local policies governing gas drilling and hydraulic fracturing do not adequately protect our valuable natural resources. We are also concerned that drilling sites are too often not being reclaimed with wildlife-friendly vegetation.*

tier of New York, northern and western half of Pennsylvania, eastern third of Ohio, most of West Virginia, and a small slice of western Virginia. The latest estimates by the U.S. Department of Energy are that the Marcellus formation has a potential recoverable volume of nearly 300 trillion cubic feet. That is enough to supply all natural gas demand in the U.S. for at least 10 years. This obviously interests numerous Americans, many/most of whom do not hunt or fish, so it is up to the conservation community to minimize the impacts of gas drilling on wildlife species and their habitats.

Pennsylvania is at the epicenter of the Marcellus formation, and the Pennsylvania Energy Impacts Assessment estimated the Keystone State could have 60,000 wells by

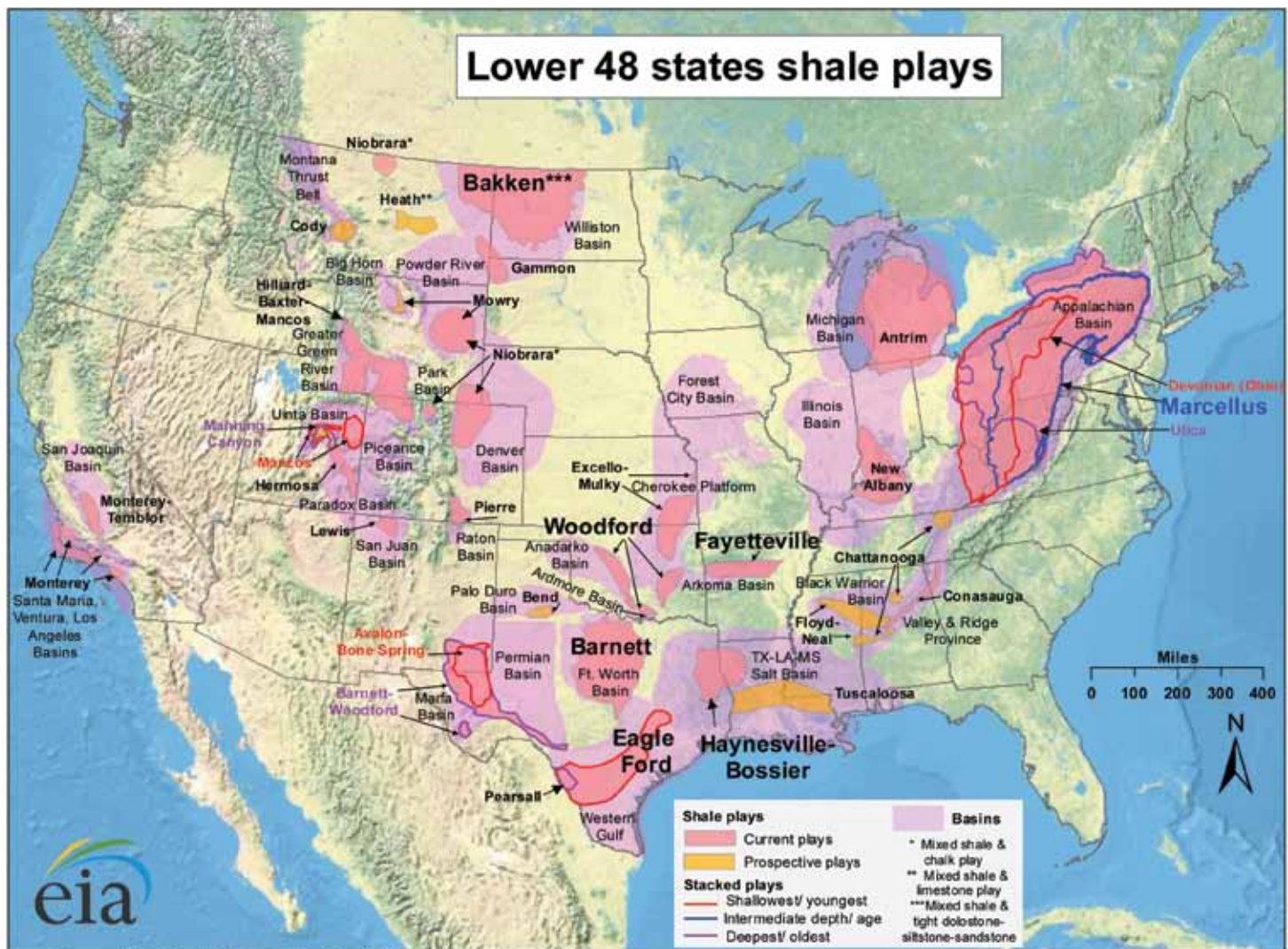
2030 (remember that each requires 2 to 8 million gallons of water to frack). These wells will be on 6,000 to 15,000 new well pads, and 34,000 to 82,000 acres of forest could be cleared to accommodate them. Such clearing will likely negatively impact forest interior species, but can impact whitetails and other “edge” species in a positive manner. The key will be for deer and habitat managers to work with drilling companies during the well pad and pipeline reclamation phases. The bigger issue however, is the tremendous alteration that will occur to the landscape.

The Sportsmen Alliance for Marcellus Conservation (SAMC; <http://sportsmenalliance.org/>) is a coalition of more than 265,000 sportsmen and women working to reduce the negative impacts caused by gas drilling in the Marcellus Shale on hunting, fishing, trapping and other outdoor sporting activities. The SAMC is at the forefront of knowledge with respect to current drilling policies, regulations and activities in the Marcellus region, and it has identified several potential issues to monitor. The breadth of these issues encompasses all sportsmen and women (not just deer managers), but as stewards of our natural resources it is important to be cognizant of the potential impacts. The SAMC’s list includes treatment and disposal of wastewater; spills, leaks and illegal discharges; stormwater runoff and sedimentation; wastewater storage; air quality; forest fragmentation; soil compaction and truck traffic; attraction of wildlife to contaminated soil and wastewater; and effects on outdoor experiences such as excessive noise from drilling operations and loss of access to public and/or private lands.

From a whitetail’s perspective, the above items are important across their range, but they are especially noteworthy in the Marcellus region where:

- Pennsylvania has nearly 900,000 resident deer hunters;
- New York hunters spend over 5.7 million days hunting whitetails annually;
- \$14.8 million is spent in Virginia annually on hunting licenses, tags, permits and stamps;
- 13 percent of West Virginia residents purchase a hunting license (the national average is 5 percent); and





Source: Energy Information Administration based on data from various published studies.  
Updated: May 9, 2011

- The percentage of non-resident licenses, tags, permits and stamps purchased in Ohio has increased nearly 400 percent from 1990 to 2009.

### Regarding Whitetails

There are numerous issues with natural gas drilling that will impact whitetails. Creation of young forests, early successional habitat, and food plots will benefit deer in many cases. The reclamation of entry roads, well pads and pipelines offers an excellent opportunity to plant deer-friendly vegetation such as hard and soft mast-producing trees and shrubs, thermal and bedding cover, and legumes, forbs and other high-quality forage species.

It is important to refrain from planting cool-season grasses such as fescue, orchardgrass and timothy, and invasive non-native species such as autumn olive,

multiflora rose and bush honeysuckle.

Conversely, contaminated soils and wastewater, loss of travel corridors, and increased worker presence and truck traffic will negatively impact deer. In addition, deer hunters can be negatively impacted by a loss of access to hunting lands due to drilling operations, or from the effects of drilling operations on deer movement and behavior patterns. The technology being used today is so new that many impacts have not been fully studied, and there surely are others that are currently unknown. A major concern with existing operations is that drilling is occurring at such a rapid pace and with so little regulatory oversight that we may not be properly safeguarding our irreplaceable natural resources.

### QDMA's Recommendations

QDMA is a member of the Sportsmen

Alliance for Marcellus Conservation (SAMC) and is not opposed to gas drilling. However, we are concerned that current federal, state and local policies governing gas drilling and hydraulic fracturing do not adequately protect our valuable natural resources. We are also concerned that drilling sites are too often not being reclaimed with wildlife-friendly vegetation. The QDMA encourages sportsmen and women to become educated and engaged on the issues relating to natural gas drilling in their area, and encourage landowners with drilling operations to properly reclaim their sites. We also work with SAMC and other conservation organizations to support responsible energy development and ensure that policies on drilling activities adequately protect valuable natural resources including clean water and critical habitat for fish and wildlife.



## INCREASED HUNTING LICENSE SALES

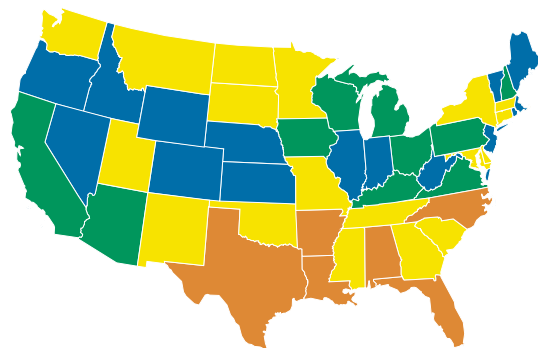
Most sportsmen and women realize that hunters are the foundation of wildlife management programs and that they fund the lion's share of our state and provincial wildlife agencies. In fact, in 2006 the economic contributions from all hunting activities in the U.S. were over \$66 billion dollars!

We may be in the minority (only 4.9 percent of the U.S. population purchases a hunting license in any given year), but we pour our heart, soul, and finances into pursuing our favorite game animals. This is one reason why hunters are so critical to the welfare of wildlife populations, and why wildlife suffers with fewer hunters in the woods, fields and waterways across North America.

Numerous articles in recent years have painted a bleak picture of hunter numbers and our future. However, this is not one of those commentaries, because following long-term declines, the number of paid hunting license holders in the U.S. increased

increases occurred from 1991 to 1992, 1998 to 1999, 2003 to 2004, 2005 to 2006, and from 2008 to 2009. Notably, the increase from 2008 to 2009 was the largest year-to-year change (+3.6 percent) among any consecutive years since 1990 and was twice as high as the next highest consecutive year

### Trends in Hunting License Sales, 2006-2009



- Increased license sales every year, 2006 to 2009
- Increased license sales two of three periods
- Decreased license sales two to three periods
- Other categories

### License Sales by Region with Year-to-Year Trend, 2006 to 2009

| Region            | 2006              | trend | 2007              | trend | 2008              | trend | 2009              |
|-------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|
| Midwest           | 5,029,456         | -     | 5,005,363         | -     | 4,959,005         | +     | 4,988,933         |
| Northeast         | 2,814,165         | -     | 2,776,458         | -     | 2,731,468         | +     | 2,821,615         |
| Southeast         | 4,433,737         | -     | 4,322,708         | +     | 4,389,648         | +     | 4,784,435         |
| West              | 2,346,240         | -     | 2,345,935         | +     | 2,367,066         | +     | 2,378,545         |
| <b>U.S. Total</b> | <b>14,623,598</b> | -     | <b>14,450,464</b> | -     | <b>14,447,187</b> | +     | <b>14,973,528</b> |

3.6 percent from 2008 to 2009 (the most recent years for which license numbers are available) according to National Shooting Sports Foundation data. The actual numbers went from 14,447,187 to 14,973,528, but the true number of hunters is much higher and is estimated to be at least 20.5 million. This number includes the paid license holders, as well as youth hunters (7 years of age and older) and other hunters (such as landowners) who are not required to purchase a hunting license.

The increase in license holders is noteworthy because the number of paid hunting license holders in the U.S. steadily declined from 16,551,886 in 1979 to 14,447,187 in 2008. More recently, from 1990 to 2009 the number decreased in 14 of 19 year-to-year comparisons. The only

increase or decrease.

Numerous initiatives such as Families Afield legislation (see page 25 in the 2011 Whitetail Report), the Take One Make One program, and others aim to reverse the trend of reduced hunter numbers. The good news is they appear to be working. Over half (26 of 50) of states increased their number of paid hunting license holders at least two of three times from 2006 to 2007, 2007 to 2008, and 2008 to 2009 (the four most recent years of hunter license data available). Even more impressive is that six states increased them during all three periods! (See the map on this page). Conversely, only one state (Iowa) had fewer paid hunting license holders during each of the three time periods, and only nine states sold fewer hunting license for two of

the three time periods.

All six states that increased license sales during each of the past three available license periods are in the Southeast (Alabama, Arkansas, Florida, Louisiana, North Carolina and Texas), and fortunately, the 20 states that increased license sales during two of the three years are spread across the whitetail's range. Four are in the Midwest (Minnesota, Missouri, North Dakota and South Dakota), five are in the Northeast (Connecticut, Delaware, Maryland, Massachusetts and New York), five are in the Southeast (Georgia, Mississippi, Oklahoma, South Carolina and Tennessee), and six are in the West (Alaska, Hawaii, Montana, New Mexico, Utah and Washington).

Amazingly, all 11 states (100 percent) in the Southeast increased license sales during at least two of the three time periods. Only four of 13 (31 percent) Midwest states, five of 13 (38 percent) Northeast states, and six of 13 (46 percent) West states matched that claim. Nationwide, the total number of paid hunting license holders increased appreciably from 2008 to 2009 and numerous states have increased multiple times in the past few years. Notably, Texas increased its hunting license sales during six of the last eight years and North Carolina increased license sales during seven of eight years since 2001!

### QDMA's Recommendations

The QDMA clearly recognizes the importance of hunter numbers and license sales. We support state and provincial agency initiatives to enhance hunter recruitment and retention efforts. The QDMA encourages sportsmen and women to mentor young and/or new hunters to ensure a strong future for our ranks. Internally the QDMA created a Youth Education and Outreach Program and a Mentored Hunting Program to assist with these efforts (learn more at QDMA.com). Finally, we encourage all sportsmen and women (whether they hunt or not) to purchase a hunting license annually to support wildlife conservation in their state or province.

## PARTICIPATION BY WOMEN HUNTERS INCREASING



Hunters are the backbone of the wildlife management system in the U.S. and Canada, and an increasing number of hunters is a positive sign for the future of wildlife stewardship and conservation. While hunter numbers declined steadily from 1979 to 2009, it appears we may have turned the corner (see the facing page). One major reason for the uptick in hunter numbers is the increasing participation by females.

According to data from the National Shooting Sports Foundation, from 2002 to 2009 participation increased from 2,551,000 to 3,204,000 female hunters. This numerical increase resulted in a percentage increase from 13.8 to 16.5 percent of all hunters. By dividing total hunting participation into archery, firearms and muzzleloader, there were increases across the board for ladies. This is especially true for muzzleloader hunting as the actual number of participants more than doubled from 2002 to 2009.

Even more encouraging is the age of

### Hunting Participation by Female Hunters, 2002 to 2009

| Year | Hunting   | % Total | Archery | % Total | Firearms  | % Total | Muzzleloader | % Total |
|------|-----------|---------|---------|---------|-----------|---------|--------------|---------|
| 2009 | 3,204,000 | 16.5    | 825,000 | 13.3    | 2,981,000 | 15.8    | 563,000      | 14.8    |
| 2002 | 2,551,000 | 13.8    | 446,000 | 9.6     | 2,372,000 | 13.3    | 270,000      | 7.6     |

% Total = percentage of total hunters (or specific weapon category). For example, in 2009 female archery hunters consisted of 13.3 percent of all archery hunters.

participants. The average age of archery, firearms and muzzleloader hunters all declined from 2002 to 2009. This is in direct contrast to male participants as the average age increased for all hunter types from 2002 to 2009. While the average age for male hunters ranges from 36.7 years (archery) to 40.9 years (muzzleloader), female hunters range from 32.0 years (muzzleloader) to 35.5 years (firearms). Thus, lady hunters are younger and becoming increasingly moreso. The largest participation increases are by females 17 years old and younger and those 18 to 24 years old. These statistics are extremely promising for our hunter ranks and for the future of wildlife management.

### QDMA's Recommendations

The QDMA supports numerous hunter recruitment and retention programs and is extremely encouraged by the increasing participation rates of female hunters. The QDMA recommends and is equally encouraged that firearms, archery, and hunting apparel companies manufacture items targeting female hunters. We also support increased involvement in female-specific education programs such as Becoming an Outdoors Woman (BOW). Finally, we strongly encourage adults to mentor young ladies and expose them to the outdoors at every opportunity.



## CHAINSAW INJURY STATISTICS AND SAFETY TIPS

With an explosion in Quality Deer Management (QDM) over the last decade, scores of hunters and landowners now look forward to getting outside each year, breathing some fresh air and practicing what they preach – but we're not talking about deer season. These QDM'ers look forward to their absolute favorite "season," time outdoors doing habitat work!

Managing white-tailed deer habitat often means operating power equipment, and perhaps the most common tool utilized when performing habitat projects on QDM or other recreational hunting properties is the chainsaw. Chainsaws are known for their extreme versatility and relatively inexpensive cost. However, they are also believed by some to be the most dangerous hand tool that can be purchased on the open market; let's face it, the chainsaw requires no license and no training is needed to own or operate one.

### Statistics Don't Lie

According to the U.S. Consumer Product Safety Commission (CPSC) National Electronic Injury Surveillance System, over 340,000 estimated chainsaw-related injuries were administered in hospital emergency room (ER) departments between 1999 and 2010. This equates to a mean of 28,344 injuries per year; which is more than 60 times as many hunting-related accidents that occur annually. Of course, many people other than deer hunt-

ers use chainsaws. Yet, it's important to realize that this figure is simply the reported number of chainsaw accidents in ERs; it does not include out-patient visits or any unreported data, so the number of annual injuries could easily be much higher.

During that time, 74 percent of all chainsaw injuries occurred to the hands (34 percent; includes hands, wrists and fingers) and legs (40 percent; includes knees, upper and lower legs, and ankles) of chainsaw users. In addition, although rare, 162 chainsaw-related fatalities were also reported to the CPSC between 2001 and 2011.

Finally, according to insurance underwriting carriers specializing in forest management, the average chainsaw injury requires over 100 stitches and costs between \$5,000 and \$12,000. Moreover, the University of Florida Cooperative Extension Service reported that national medical costs for chainsaw injuries and worker's compensation are estimated at more than \$300 million and \$100 million per year. Clearly, recreational users must take chainsaw safety seriously, if not for financial reasons, for the more obvious justification of personal welfare.

### QDMA's Recommendations

While a chainsaw is a fantastic QDM tool, it can hurt you faster than any other tool in your box. The QDMA strongly encourages that you read the manual and

### Did You Know?

- 1 in 5 chainsaw injuries is the result of kickback
- A chainsaw chain can move up to 68 miles per hour
- When a chainsaw is at full speed, more than 600 teeth pass a given point per second
- A muffler on a chainsaw can reach as much as 900 degrees F

### Chainsaw Safety Tips

- Keep the chainsaw handle clean and dry.
- Make sure that the handle is free from oil or fuel.
- Keep your chainsaw properly maintained.
- Follow the manufacturer's suggestions for sharpening and maintaining the equipment.
- Never use a chainsaw to cut anything other than wood!
- Clear loose debris from the area.
- Remove combustible materials.
- Look for broken or dead limbs in the tree to be felled.
- Assure that there are no power lines nearby.
- Make sure you have an escape route.
- Be aware of where others are in relation to what you are cutting. This includes people, houses, automobiles, etc.

SOURCE: FLORIDA COOPERATIVE EXTENSION



closely follow the manufacturer's recommendations. Also, be sure to always wear personal protective equipment (PPE) that meets requirements set by the American National Standards Institute (ANSI) or the American Society for Testing and Materials (ASTM). This is especially true of the legs and hand areas, but also for your hearing, vision, and other vulnerable body parts. Ultimately, although the number of chainsaw related injuries has declined significantly (25 percent or more) over the last 30 years with the addition of more safety measures, the QDMA would like to see the number of accidents decrease even more.



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## QDMA 12th Annual National Convention

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## IMPORTANT DEER FOODS: FORBS AND SHRUBS

Food studies have identified several hundred plant species that deer will consume during the course of a year. Some are used seasonally, some only when little else is available, and some are preferred regardless of season and other species' availability. As a deer manager, it is important to understand the preferred forages where you live and/or hunt. While learning everything deer eat in your area is a daunting task, the QDMA has just made it a little easier.

Whitetails eat a variety of plant types such as trees, shrubs, herbaceous forages (forbs), and agricultural crops. Most hunters can easily identify the agricultural crops in their area, and they are well versed in which ones deer prefer. Many hunters can also readily identify the predominant tree species in their area that deer use, but far fewer hunters can identify the important shrub and herbaceous species where they hunt. Therefore, the QDMA surveyed every state and provincial deer project leader and asked them to provide 10 of the top naturally occurring native herbaceous and shrub species that whitetails use in their jurisdiction.

We received a species list from about half of the states and from six of eight provinces that we surveyed. Some lists were current and others included data from past studies. We combined states into three regions – Midwest, Northeast, Southeast – and created regional lists of important shrub and herbaceous deer foods (unfortunately we only received data from two states west of the plains). The species in these lists (see the table) are arranged alphabetically, and only some were selected based on scientific analyses. Most were identified by the state/province's deer biologist as species commonly eaten by deer in their jurisdiction. We present this data only on an informational basis, but strongly encourage deer



QDMA staff member Matt Ross, a wildlife biologist and forester, looks at one of many species of greenbriar – which ranked highly in the Midwest, Southeast and Northeast among important deer foods. Being able to identify locally important plant foods for deer is a critical skill for hunters who want to improve wildlife habitat.

hunters and managers to learn to identify (and in many cases promote) the species listed for their region. Additional information is provided below, including five more “notable” species for each region.

Some species are region-specific while others are used across much of the whitetail's range. For example, brambles (blackberry, etc.) were reported as an important deer forage in all three U.S. regions and in Canada. Grapes and greenbriar were listed as top forages in all three U.S. regions, and poison ivy, ragweed and wild rose were listed in two of three U.S. regions (wild rose was also listed in Canada).

**Midwest** - We received data from four states (Illinois, Indiana, Kansas and Kentucky). Brambles and grape were most often reported. Coralberry, dogwoods, greenbriar, Illinois bundleflower, ragweed, trumpet creeper, wild lettuce and wild rose were also important species. Other notable plants included asters, plums, poke-weed, sumac and trillium.

**Northeast** - We received data from four states (Maine, New Hampshire, New Jersey, and Pennsylvania). Bracken fern, brambles, grape and greenbriar were reported by multiple states. Canada mayflower, jewelweed, poison ivy, Virginia creeper, wild rose and wild sarsaparilla were also important species. Other notable plants included blue bead lily, goldenrod, plantain, sumac and winterberry.

**Southeast** - We received data from nine states (Alabama, Arkansas, Florida, Louisiana, Mississippi, Oklahoma, South Carolina, Tennessee and Texas). Brambles, grape, greenbriar, honeysuckle (primarily the native coral, but also non-native Japanese/white) and ragweed were listed by nearly every responding state.

Pokeweed and strawberry bush were listed by about half of the states, and American beautyberry, beggar's lice and poison ivy were also listed by a third of the states. Other notable plants included Alabama supplejack, devil's walking stick, Florida pusley, old field aster and trumpet creeper.

**Canada** - We received data from six provinces (British Columbia, Manitoba, Nova Scotia, Ontario, Quebec, Saskatchewan). Asters, brambles, choke cherry, fireweed, pondweed, snowberry, sow thistle, trillium, Virginia strawberry and wild rose were all reported from more than one province. Other notable plants

## IMPORTANT DEER FOODS YOU SHOULD KNOW

QDMA surveyed state and provincial deer project leaders and asked them to provide 10 of the top naturally occurring native forbs and shrubs that whitetails use in their regions. Below are the 10 most commonly mentioned species in each region. They are not necessarily the “10 most important” species for each region. Some, such as trillium, are highly preferred but may only be found in areas of low deer density. Others, such as bracken fern, may only be selected in areas of high deer density when more preferred species are unavailable. However, these species should be viewed as important deer foods to identify and monitor.

| Region           | Common Name                 | Latin Name                         |
|------------------|-----------------------------|------------------------------------|
| <b>Midwest</b>   | brambles (blackberry, etc.) | <i>Rubus</i> spp.                  |
|                  | coralberry                  | <i>Symphoricarpos orbiculatus</i>  |
|                  | dogwoods                    | <i>Cornus</i> spp.                 |
|                  | grape                       | <i>Vitis</i> spp.                  |
|                  | greenbriar                  | <i>Smilax rotundifolia</i>         |
|                  | Illinois bundleflower       | <i>Desmanthus illinoensis</i>      |
|                  | ragweed                     | <i>Ambrosia</i> spp.               |
|                  | trumpet creeper             | <i>Campsis radicans</i>            |
|                  | wild lettuce                | <i>Lactuca virosa</i>              |
|                  | wild rose                   | <i>Rosa acicularis</i>             |
| <b>Northeast</b> | bracken fern                | <i>Pteridium aquilinum</i>         |
|                  | brambles (blackberry, etc.) | <i>Rubus</i> spp.                  |
|                  | Canada mayflower            | <i>Maianthemum canadense</i>       |
|                  | grape                       | <i>Vitis</i> spp.                  |
|                  | greenbriar                  | <i>Smilax rotundifolia</i>         |
|                  | jewelweed                   | <i>Impatiens capensis</i>          |
|                  | poison ivy                  | <i>Toxicodendron radicans</i>      |
|                  | Virginia creeper            | <i>Parthenocissus quinquefolia</i> |
|                  | wild rose                   | <i>Rosa acicularis</i>             |
|                  | wild sarsaparilla           | <i>Aralia nudicaulis</i>           |
| <b>Southeast</b> | American beautyberry        | <i>Callicarpa americana</i>        |
|                  | beggar's lice               | <i>Desmodium obtusum</i>           |
|                  | brambles (blackberry, etc.) | <i>Rubus</i> spp.                  |
|                  | grape                       | <i>Vitis</i> spp.                  |
|                  | greenbriar                  | <i>Smilax rotundifolia</i>         |
|                  | honeysuckle                 | <i>Lonicera</i> spp.               |
|                  | poison ivy                  | <i>Toxicodendron radicans</i>      |
|                  | pokeweed                    | <i>Phytolacca americana</i>        |
|                  | ragweed                     | <i>Ambrosia</i> spp.               |
|                  | strawberry bush             | <i>Euonymus americanus</i>         |
| <b>Canada</b>    | asters                      | <i>Aster</i> spp.                  |
|                  | brambles (blackberry, etc.) | <i>Rubus</i> spp.                  |
|                  | chokecherry                 | <i>Prunus virginiana</i>           |
|                  | fireweed                    | <i>Epilobium angustifolium</i>     |
|                  | pondweed                    | <i>Potamogeton</i> spp.            |
|                  | snowberry                   | <i>Symphoricarpos albus</i>        |
|                  | sow thistle                 | <i>Sonchus</i> spp.                |
|                  | trillium                    | <i>Trillium</i> spp.               |
|                  | Virginia strawberry         | <i>Fragaria</i> spp.               |
|                  | wild rose                   | <i>Rosa acicularis</i>             |



Virginia creeper, seen here climbing a white oak tree, ranked as an important deer forage in the Northeast region of the United States.

included Canada mayflower, jewelweed, lupines, ragweed and wild lettuce.

### QDMA's Recommendations

The species included in the table should not be viewed as the “10 most important” herbaceous and shrub species for each region. Some, such as trillium, are highly preferred and may only be found in areas of low deer density. Others, such as bracken fern, may only be selected in areas of high deer density when more preferred species are unavailable. However, these species should be viewed as important deer foods to identify and monitor. Numerous manuals are available to help with identification such as *Weeds of the Northeast*, *Weeds of the South*, *Weeds of the Midwestern States and Central Canada*, *Forest Plants of the Southeast and Their Wildlife Uses*, and *Trees and Shrubs*.



## QUALITY DEER MANAGEMENT (QDM) DEFINED

Quality Deer Management (QDM) has continued to gain in popularity the past four decades. More hunters practice QDM on more acres today than ever before. This has resulted in healthier deer herds, healthier habitats, and enhanced hunting opportunities throughout the whitetail's range. However, many QDM critics, and even some advocates, misunderstand the QDM approach and how it should be applied to their specific area. The QDMA was founded to provide guidance and accurate information to hunters practicing QDM, and the organization has been doing that for 23 years now, but our educational mission is ongoing as new hunters encounter the philosophy. Recent magazine articles and Web forum threads suggest a new article defining Quality Deer Management would be timely.

### A Quick Background

Al Brothers, a wildlife biologist from Texas, is widely referred to as the "father of QDM." He started the movement in south Texas in the early 1970s and co-authored the landmark book *Producing Quality Whitetails* in 1975. Al was the first to formally recognize the importance of protecting young bucks, shifting harvest pressure to antlerless deer, and educating hunters.

In 1982 Joe Hamilton, then a wildlife biologist with the South Carolina Department of Natural Resources, invited Al to be the keynote speaker at the Southeast Deer Study Group meeting in Charleston, South Carolina. The Southeast Deer Study Group is the largest deer biologist, manager and researcher conference in the United States and it has been held annually since 1979. Al brought the QDM movement to South Carolina, and Joe founded the QDMA six years later in 1988. Due in large part to the efforts of Joe, now the QDMA's Director of Development, and the QDMA, this novel approach toward deer management has spread throughout the U.S., Canada, Australia and elsewhere and continues expanding today.

### Will The Real QDM Please Stand Up?

Misconceptions are a fact of life, but QDM seems to attract more than its fair



When applied correctly, QDM results in the proper number of deer for an area, a balanced adult sex ratio and age structure, and a sustainable level of enjoyment and satisfaction for the hunters involved.

share. From the myriad of inaccuracies attached to QDM here are two of the more popular ones: QDM is just about big antlers, and QDM requires killing numerous does. Let's start by defining QDM and then we'll address each misconception individually. By definition, QDM is a management approach that protects young bucks and harvests the biologically appropriate number of antlerless deer to balance the deer herd with what the habitat can adequately support. When applied correctly, this results in the proper number of deer for the area, balances the herd's adult sex ratio and age structure, and provides fantastic hunting opportunities. When applied improperly, it can result in disappointment, frustration, criticism and disagreement among hunters.

### Myth 1: QDM is Just About Big Antlers

Antlers are cool. With respect to prehistoric art, it is clear we have been fascinated by antlers for at least 50,000 years. While some modern hunters take this fas-

cination too far, the majority do not. Thus, we don't need to apologize because we enjoy viewing, photographing, measuring or collecting antlers. However, QDM is not just about bucks of any size or even just about deer at all. QDM involves Four Cornerstones and includes herd management, habitat management, hunter management and herd monitoring. QDM is about managing the deer herd to have the proper number and age class of each sex, managing the habitat to provide high-quality forage and cover, educating hunters to be better natural resource stewards, and collecting data on the herd, such as harvest or observation data, in order to make wise management decisions (such as the proper number of antlerless deer to shoot each year). Thus, QDM is more encompassing than just focusing on deer, and especially on only large bucks.

From a buck perspective, QDM strives to provide a full complement of age classes rather than only having young animals. In simplest terms, you can accomplish

this by protecting the majority of yearling (1½-year-old) bucks annually. Yearling bucks are generally the easiest adult deer to kill during the hunting season, and affording them protection during the year they grow their first set of antlers goes a long way toward improving the age structure of the herd. You can go ahead and start shooting 2½-year-old bucks as part of your QDM program. Compared to yearlings, they are more difficult to harvest, so you're far less likely to overharvest this age class. That means some will slip through to become 3½ years, 4½ years, and older, so you should have a full complement of age classes by just protecting yearling bucks.

This is where all QDM practitioners begin their journey. Some managers will then choose to also protect 2½-year-old bucks. Is this still QDM? Yes, and it's still QDM if he/she advances one step further and protects 3½-year-olds.

However, trying to protect all bucks up to and including 4½-year-olds gets more difficult because bucks die of many causes. More acres under management will be needed, more effort must go into habitat improvement and doe harvest, and fewer hunters will be satisfied with the rate of buck harvest success. This range of management intensity is often referred to as trophy deer management, and relatively few hunters have what's necessary to achieve success and remain satisfied with results over time.

Here is where some of the QDM con-



The appropriate antlerless harvest for a property should be determined locally. Some QDM programs will require large antlerless harvests, some will require moderate antlerless harvests, and some will require minimal or even no antlerless harvests.

fusion arises. From a buck harvest perspective, all QDM programs strive to protect the majority of yearling bucks, but it is up to the individual manager whether he/she starts harvesting bucks at 2½, 3½, or 4½ years of age. This flexibility is one aspect making QDM applicable to such a wide array of hunters and deer herds.

Do you need to protect every yearling buck? Absolutely not. The QDMA fully supports youth hunters having the opportunity to shoot any legal deer; yearling bucks included. Taking some yearlings is fine as long as you protect the majority of them. Fortunately, protecting yearling bucks is much more common today than in past decades. In 1989, 61 percent of the antlered bucks shot in the U.S. were only 1½ years old. By 2010 that number had dropped to 38 percent! (See page 6)

#### **Myth 2: QDM Requires Killing Numerous Does**

Many QDM pioneers have been quoted as saying, "Shoot every doe you can, and then shoot three more." Such statements were generally true when spoken, but times and situations change, and as managers we need to adapt to current conditions. In the past, many programs benefitted from

aggressive antlerless deer harvests, hence the recommendation to shoot all available does. However, as deer herds are reduced, similarly aggressive harvests are less necessary or advised. In addition, predator populations are increasing in many areas of the U.S. and Canada. Expanding coyote, black bear, bobcat and wolf populations are important mortality sources, and in some cases new mortality sources, for deer herds (see the 2010 *Whitetail Report*).

The take-home message is the appropriate antlerless harvest for a property should be determined locally. The local deer density, habitat quality, mortality factors (predators, winter severity, vehicle kills, etc.) and landowner goals all impact the number of antlerless deer that can or should be harvested. These factors vary annually and thus antlerless harvest goals should also be determined on an annual basis. Based on the above factors, some QDM programs will require large antlerless harvests, some will require moderate antlerless harvests, and some will require minimal or even no antlerless harvests. It's as incorrect to state that all QDM programs require large antlerless harvests as it is to state that all hunters hunt from a vehicle, or over a food plot, or in a swamp.

#### **In Conclusion**

QDM encompasses much more than just antlers or even shooting deer. Herd management is only one of the Four Cornerstones of QDM. Many critics incorrectly equate QDM to antler restrictions, trophy deer management, or excessive doe harvests, but hopefully you realize those accusations are false and are now better armed with information to refute such assumptions. Also, these claims completely overlook the efforts expended on the other three Cornerstones. Millions of acres of improved wildlife habitat, more educated sportsmen and women being better ambassadors for hunting, and all the deer data collected to establish realistic buck management goals and determine appropriate antlerless harvest rates. Hopefully, even those who disagree with protecting yearling bucks can appreciate a QDM practitioner's habitat management, hunter education and herd monitoring efforts.

*All QDM programs strive to protect the majority of yearling bucks, but it is up to the individual manager whether he/she starts harvesting bucks at 2½, 3½, or 4½ years of age. This flexibility is one aspect making QDM applicable to such a wide array of hunters and deer herds.*



## SENIOR WHITETAILS

Most hunters consider a 5½-year-old buck to be really old. We agree with them, as only a small percentage of bucks live that long in the wild. In general, however, it's not the "wild" that's that hard on them. It's humans who determine longevity of most wild deer, and we are very adept at removing a high percentage of bucks at young ages. Research in Pennsylvania and elsewhere shows that hunter harvest is the primary mortality source for deer 1½ years old and older. We are also serious predators outside of the hunting season, as State Farm Insurance Company estimates there are approximately 1.5 million deer/vehicle collisions in the United States annually. Throw in severe winters, droughts, floods, diseases and predators, and there are plenty of opportunities for deer to die. However, they are tough critters, and if we don't hit them with an arrow, bullet or Chevrolet, there is a strong chance they'll be alive the following deer season.

Given all the above factors, it's logical to assume that very few wild deer live as long as they're capable of living. Therefore, records of captive deer may provide a better estimate of a whitetail's true longevity. We talked to researchers and managers from across the whitetail's range to find examples of known-age captive and wild deer pushing the age limits. The results were astonishing and will surprise many who dream of that elusive 4½ or 5½-year-old "grandpa" buck.

### The Luxuries of Captivity

Captivity offers numerous advantages to whitetails. Most captive deer are fed abundant amounts of high-quality feed, predation is generally minimal or absent, and some are even administered vaccines and medicines. Such conditions provide many luxuries not afforded to wild deer.

Most of the oldest captive deer on record were does. Dr. Peter Pekins from the University of New Hampshire ran the UNH Wildlife Research Facility for nearly two decades. Pete and his students raised countless deer during his tenure, with the two oldest being 17- and 18-year-old does. "Pippin" was euthanized at 18 years of age following a shoulder injury that left her crippled. "Margo" was euthanized at 17 years of age due to closing of the facility



"Bucky," a resident of the University of Georgia Deer Lab research facility, was more than 9 years old when this photo was taken in 2011, but another buck at the same facility lived to be 14 years old, and multiple does have made it to 18 years. While it's much easier for captive deer to reach these advanced ages, free-ranging deer have also been documented reaching "geezer" status.



and transport restrictions that prevented her from being relocated. Interestingly, Pippin was Margo's mother, and both bore twin fawns annually right up to the time of their deaths.

David Osborn is the research coordinator for the University of Georgia's deer facility. During his time there, David has raised three or four does that reached 18 years and a buck that reached 14 years! The buck was still in good shape but had to be euthanized due to his aggressive nature.

Dr. Grant Woods of Woods & Associates and GrowingDeer.tv recalled one of Dr. Harry Jacobson's research does from Mississippi State University that was 22 years old and still producing fawns.

Leonard Lee Rue includes a statement in his *Encyclopedia of Deer* of a 23-year-old captive deer, but he didn't include any information on sex, location or reproductive status.

The oldest captive deer record we found was from Joe Hamilton,

QDMA's Director of Development (and co-author of this report). Joe recounted a captive doe in Texas on the Kerr Wildlife Management Area that was 23 to 24 years old. Amazingly, she had a fawn at that extended age.

We're sure there are researchers and/or hobby farmers who have raised deer older than those listed here. Our point is not to claim a record age but to identify the upper limits of whitetail lifespan. Many of the researchers we spoke with said a deer's teeth simply wear out at some point in their late teens, leading to an inability to eat effectively and declining health.

### Free-Ranging Seniors

Given the myriad of things that bite, shoot, hit, eat, chase and stress deer, it's amazing that any free-ranging whitetails reach ages even approaching those of cap-

tive deer. However, published accounts of known-age wild deer not only approach the previously mentioned ages, some surpass them.

Joe Hamilton shared the story of a tagged doe shot on the Webb Center Wildlife Management Area in Garnett, South Carolina. She was killed at 14½ years of age in the exact same field where she was tagged as a fawn! Surprisingly, her tooth-



In both captivity and in the wild, does tend to hold most of the longevity records. One captive doe in Texas was known to be 23 to 24 years old. Several free-ranging does in Michigan were documented to be in their late teens (they were captured and tagged as fawns, so their exact age at time of harvest was known.)

wear suggested she was only 4½ years old, so this is a good reminder that toothwear and replacement provides a minimum age for deer 2½ years and older and is not nearly as accurate as cementum annuli analysis (CAA) for mature deer.

John Ozoga, retired deer researcher from Michigan, recounted known-age deer from multiple studies in the upper Midwest, including a 15-year-old doe in north-central Minnesota, a 19-year-old doe in northern Minnesota, and a doe in upper Michigan that was 19 years and 10 months. John even knew of a buck from northern Minnesota that was 17 years old! Amazingly these deer approached the upper age limits despite severe upper Midwestern winters and heavy hunting pressure.

### Two Enormous Sample Sizes

Dr. Mickey Hellickson of Orion Wildlife Management Services, and formerly the chief wildlife biologist on the King Ranch, sent 800 to 1,500 buck incisors annually to Matson's Lab in Milltown, Montana for CAA. He amassed an enormous sample size of over 10,000 harvested bucks. The King Ranch is well known for mature bucks, but it's mind boggling to consider that hunters harvested bucks that were more than 10 years old on a fairly regular basis and one that reached 17 to 18 years.

Matson's Lab has been aging mammals for over three decades. Most state, federal and private management agencies use their services, and from 1978 to September 2010, Matson's had aged 212,540 white-tailed deer from across North America. Of all these, the oldest came from North Carolina and was 19 years old. Their records don't list the sex, but it was likely a doe. Similarly, their oldest mule deer was 20 and oldest black-tailed deer was 22.

### A Testament to Toughness

Winter storms, summer droughts and poor habitat management can all leave deer nutritionally deprived. Coyotes, black bears, wolves and other predators eat whitetails. Diseases and parasites negatively impact their share, and we hit them with our vehicles. Considering these and other sources of stress on deer, it's amazing that any live past a few years. They are expert survivors due in large part to their being one of the toughest critters on the planet. From their beauty to their grace and sheer strength, we are infatuated with whitetails, and are glad that an increasing number of hunters and current deer management programs are allowing bucks to get at least a year closer to their lifespan potential.

## TAKING THE RIGHT NUMBER OF DOES, FAWNS & BUCKS

Prior to every deer season you should calculate your harvest prescription. Developing a deer harvest prescription provides a biological plan for the hunting season and a means to reach the goals in your deer management program. It is essentially your roadmap to success, and to be most successful you should actually develop three prescriptions: one each for does, bucks and fawns.

Harvest prescriptions can be based on a quota for a property, quota per hunter, deer age classes, antler criteria, fawn rearing status, or a combination of these and/or other factors. Numerous variables should be considered including deer density, herd age structure, habitat quality, property size and ownership, neighboring practices, adult sex ratio, fawn recruitment rate, seasonal conditions, your deer management goals, and possibly others. Fortunately, QDM is not a “one size fits all” approach, so you can and should base your prescriptions on your specific location and use the factors and variables most conducive to your situation. This flexibility greatly enhances the success of QDM programs and adds to the enjoyment level for participants.

### How Many Does Should I Harvest?

This is undoubtedly the most commonly asked question we receive each year as fall approaches. Hunters ask whether they should shoot any, a few, or a lot of does. By asking some additional questions we can generally give them a target doe



QDMA Regional Director Kevin Graves of South Carolina and his son, Carson, with two healthy does. Tracking harvest data like body weights and lactation rates can reveal increasing health, confirming a well-designed harvest prescription.

harvest. Here is the information we use to make those decisions, and by following these steps you can develop your target doe harvest for the upcoming season.

Population models used by many state wildlife agencies across the whitetail's range suggest a harvest of 20 to 30 percent of the adult does in a given population will stabilize the herd (“adults” are 1½ years or older). Some suggest you need to remove a higher percentage, but these were created over the past few decades during periods of rapid whitetail population growth and expansion, and during periods with fewer predators. Given this, we encourage you to start with a more conservative adult doe removal rate. For clarity, this includes adult does only and not fawns. If your goal is to increase the deer herd, harvest fewer than 20 to 30 percent of the does. If your goal is to decrease the herd, harvest more.

Trail-camera surveys are a great technique for estimating the number of does on a property, and if you conducted a pre-season trail-camera survey this year, you have that number available. You can then determine the percentage of does to remove and calculate your prescription. For example, if you estimate there are 20 does using the property and you want to stabilize the herd, shoot four to six does.

Conducting a trail-camera survey to estimate deer density is a preferred method for determining harvest rates. But if you don't have a reliable estimate of the number of does using the property, you can use a ballpark harvest rate based on habitat quality. To stabilize the herd shoot one adult doe for every 25 to 100 acres of high-quality habitat, one for every 100 to 300 acres of moderate-quality habitat, and one for every 300 to 640 (or more) acres of low-quality habitat. If you are trying to reduce deer density, set your goal higher than these rates; if your habitat can support more deer in healthy condition, set your goals lower than these rates. If you need help evaluating the relative quality of local habitat, give your state agency biologist a phone call.

Whichever method you use, determine your prescription prior to hunting season and stick to it throughout the season. Do not reduce your target doe harvest during the season based on hunter sightings (or the lack of). One exception to this is if hunters find a lot of dead deer, for example from hemorrhagic disease or others.

### How Many Bucks Can I Harvest?

The number of bucks you can harvest will depend highly on your level of restraint and the age classes you desire to shoot. If you choose to shoot a lot of young bucks, the age structure of the herd will be composed of something like 75 percent 1½-year-olds, 15 percent 2½-year-olds, 7 percent 3½-year-olds, 2 to 3 percent 4½-year-olds, and 0 to 1 percent 5½-year-old and older bucks (see the pie charts on the facing page for a visual representation). However, if you choose to pass a lot of young bucks the age structure of the population will be composed of something like 45 percent 1½-year-olds, 25 percent 2½-year-olds, 15 percent 3½-year-olds, 10 percent 4½-year-olds, and 5 percent 5½-year-old and older bucks. These herds are obviously very different, and they will provide extremely different hunting opportunities.

Again, trail-camera surveys are a great technique for estimating the number and age classes of bucks on a property. You can then select the age classes to harvest and calculate your prescription. This helps you

*Trail-camera surveys are a great technique for estimating the number and age classes of bucks on a property. You can then select the age classes to harvest and calculate your prescription.*

*This helps you establish realistic expectations for a property and goes a long way toward keeping the program fun and rewarding.*

establish realistic expectations for a property and goes a long way toward keeping the program fun and rewarding. If your goal is to shoot 3½-year-old and older bucks, use your trail-camera survey results to estimate the number of available bucks.

If you don't have an estimate of bucks by age class, use a ballpark estimate based on property size and habitat quality. We must stress this is only a ballpark estimate, and it can range widely based on habitat quality and location. In general, you can produce about three to four 3½-year-old and older bucks for every 500 acres of high-quality habitat. We have helped manage lands where this number of bucks was difficult to reach and others with twice that harvest rate.

Doubtful about your initial prescription? Don't worry, your year-one prescription is merely a starting point that you can fine tune in future years.

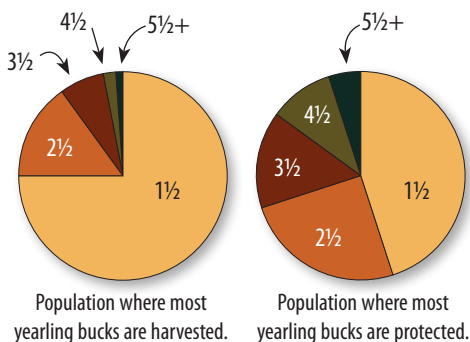
### How Many Doe Fawns Should I Harvest?

Selecting between adult does and doe fawns (6 to 9 months of age) is another way to fine-tune your herd management. Adult does produce more surviving offspring on average than doe fawns, so your choices affect herd growth. Which you choose to harvest will depend mainly on your location and your deer management goals. For example, if you're in northern Maine and your goal is to increase the deer herd, you may select fawns over adult does as they're the least reproductive segment of the herd. Conversely, if you're in an area with limited antlerless tags and your goal is to reduce the deer herd, you may pass doe fawns and use your tags on adult does.

Trail-camera surveys can be a good technique for estimating the number of fawns on a property, but not always. If bears or other predators regularly visit your baited camera sites, fawns may be underrepresented in your survey. In cases like this, fall observation surveys (sightings by hunters) often provide better estimates of fawn recruitment rates.

If possible, we like to harvest around two doe fawns per 500 acres of high-quality habitat to obtain their weights. Doe fawn weights are a great index to herd health and a valuable piece of information to collect. A few buck fawns are alright too as you

### Harvest Choices and Buck Age Structure



If you choose to shoot a lot of young bucks, the age structure of the population will probably look something like the pie on the left (showing the percentage of available bucks by age). If you protect most young bucks, the age distribution will look more like the pie on the right.

can also obtain their weights. Just be sure to keep the buck fawn harvest to less than 10 percent of the total antlerless harvest.

### How Do I Know If My Prescriptions Are Working?

The harvest data you collect will provide an evaluation of your harvest prescriptions. For example, if your goal is to reduce the deer herd, then your herd health indices (body weights, antler parameters, lactation status, kidney-fat stores, etc.) should improve. If your goal is to shoot 3½-year-old and older bucks, then your harvest records and jawbones will let you know if you're successful. Also, antler parameters and body characteristics from these bucks will help hunters improve their field judging skills.

The observation data you collect also will substantiate the prescription. For example, if your goal is to increase the deer herd, then your observation data should indicate more deer, including more bucks, does and fawns. With respect to bucks, if your goal is to increase the age structure of the herd, your observation data should confirm this if your management program is using the proper techniques to protect young bucks from harvest. Follow-up trail-camera surveys in subsequent years can be used to verify your observation data.

### Fine Tuning Your Prescriptions

After the first year, you can use your harvest data to fine tune your harvest pre-

scriptions. Total the number of adult does (1½ years and older) you harvested, and determine the percentage of this total that was 4½ years and older. In herds where antlerless deer are harvested each year, a good rule of thumb is this percentage should be at least 25 to 30 percent. If hunter effort and the fawn recruitment rate are similar from year to year, you can use this data to estimate whether the deer herd is increasing, stable or decreasing.

Analyze the average weight of bucks and does by age class over time to assess whether the health of the herd is changing. Most properties don't shoot enough deer to compare weights by age class, but you can combine all does 2½ years and older into a single group and compare their average weight over time. There are numerous other pieces of harvest data you can analyze as well to determine the best way to fine-tune your harvest prescriptions.

Don't forget about your observation data. You can gain valuable insight into the health and size of a deer herd by analyzing the number of bucks, does and fawns observed per hour of hunting throughout the season and comparing those numbers to previous years. Helpful comparisons are the number of deer observed per hour during archery season, the number observed per hour during firearms season, the number of does observed per buck, and the number of fawns observed per doe.

Finally, don't forget environmental effects such as boom or bust mast crops, droughts, flooding, severe winter weather or hemorrhagic disease, and the impacts these factors can have on the deer herd.

### Fill the Prescription. Repeat.

Be sure to develop your target harvest prescriptions prior to opening day. Use trail-camera survey data to estimate the number of adult bucks and does, and use ballpark harvest estimates if survey data is not available. Assess the size and age structure of the deer herd with respect to management plan goals, and review harvest and observation data, and habitat health data if available. Then, develop a harvest prescription for bucks, does and fawns. Be sure to collect harvest and observation data during hunting season, and repeat the process again next year.



## WHITETAIL PELAGE

When we think of identifying individual whitetails using physical features, antlers usually come to mind. Coat coloration can't really help because all deer are the same color, right? Actually, there are some wide variations in deer coat coloration, seasonally and even from one individual deer to the next. You can even use some of these subtle variations to identify a few individual deer, antlered or not.

White-tailed deer coats can be all white, all black or a variety of other colorations. The majority though will appear reddish during summer and brown or brown/gray during winter. In general, whitetails will complement their primary colors with white on their belly, feet, legs, ears, throat, chin, around their eyes and nose, rump, and around the edges of and on the underside of their tail. Many deer can even be uniquely identified by the presence of specific color spots or patterns such as white stripes extending unusually high on the legs, exceptionally large white eye rings, or uniquely shaped throat patches.

### First Coat

A deer's first coat is spotted. The reddish-brown coat generally contains two rows of white spots from the back of the neck to the rump with numerous other spots covering the body. This pattern of white on dark makes for great photographs for us and even better camouflage for fawns. This color pattern breaks up a fawn's outline and is perfect for blending into environments containing sun and shade. Back in the 1950s prominent deer researchers William Severinghaus and E.L. Cheatum counted the number of white spots on three fawns and noted the numbers ranged from 272 to 342.

### Summer Coat

Whitetails grow two coats annually. The summer coat begins growing in April in most locations and contains thin reddish-brown hair. This coat is super thin and is only 0.04 to 0.18 inches deep. The coloration gives deer their red or rust appearance during summer, and the thin coat allows for maximum heat loss.

Whitetails begin shedding this coat



in August and September, with bucks and non-lactating does (those without fawns) typically shedding earlier than lactating does and fawns. Why is this? Shedding this coat and replacing it with a winter coat

requires energy and protein, and bucks and does without fawns have more to spare than does that are producing milk and fawns that are growing as much as possible before winter.



A deer's short reddish hair of summer is replaced by longer brownish-gray hair for winter. Winter coats can range from 0.2 to 1.1 inches deep – five to six times deeper than summer coats!



AUGUST



EARLY SEPTEMBER



MID-SEPTEMBER

### Whitetail Outerwear

From a fading winter coat (left) to a solid red summer coat, and eventually back to a gray winter coat, whitetails shift from well-insulated to heat-shedding outerwear as the seasons change. These trail-camera photos from the collection of QDMA member Todd Reabe of Brillion, Wisconsin, show several deer in distinct phases of coat color.

### Winter Coat

The length of daylight (known as photoperiod) largely controls timing of coat growth and shedding. When deer begin molting from summer to winter coats (or vice versa) many concerned sportsmen and women report “unhealthy” looking deer. Patches of hair loss are easy to spot, and the darker winter coat replacing the red summer coat often appears as an injury on an otherwise normal looking deer.

Winter coats replace the short reddish hair with longer brownish-gray hair. Winter coats have important thermoregulatory qualities and allow deer to survive northern winters. Winter coats can range from 0.2 to 1.1 inches deep; this is 5 to 6 times deeper than summer coats! Hair depth is critical for survival because deeper coats trap more insulating air. This is like wearing a heavy down jacket versus a satin windbreaker. A whitetail's winter coat also contains long guard hairs and short underfur, and the hairs have hollow shafts that trap air. This combination insulates deer so

well that snow can remain on a deer's back without melting.

Aaron Moen, retired Cornell University researcher estimated a 140-lb. buck's winter coat would weigh about 2.8 pounds, and a fawn's would weigh about 1.7 pounds. That may not sound like much, but think about how much hair it takes to reach those weights. The answer is – a lot.

### Throat Patches and White Tails

Ever wonder why some deer have large distinct throat patches while others are small and nondescript, or why some have a single versus a double throat patch? How about why whitetails have white rumps and white hair around the edges and on the underside of their tails? Regarding throat patches, the definitive answer is we have absolutely no idea and neither did any of the prominent deer researchers and managers we asked about it. We also found nothing in the literature regarding function or evolutionary benefit. So, we have no scientific data to offer, but we'll share two anecdotal observations regarding throat patches from our travels across the United States and Canada. In our opinion, northern deer seem to have larger and more distinct throat patches than southern deer, and double throat patches seem to be much more common in southern versus northern deer. We've seen exceptions to both of these, and there is no data to support this statement; we're merely sharing an observation.

Contrary to throat patches, function of the white rump and tail is well documented. Deer are forest dwellers in the vast majority of their range, and they are commonly found in groups during much of the year. A white rump and “flagging” tail signals alarm and allows deer to remain together while escaping danger, especially in dense cover. This body language is extremely effective and makes it easy for fawns to follow their mother or subordinates to follow the dominant animal.

It is a myth that does flag but bucks do not, as research has shown buck and doe groups will flag equally. However, single deer generally do not flag; there's no reason to when other deer are not present to benefit from the signal.

### Coats on Display

Whether the next deer you shoot is white, black, piebald, brown or gray, be sure to take a moment and closely inspect the coat's thickness and color patterns. It is yet another feature that makes the whitetail such an amazing animal.

Just because the deer is dead doesn't mean the hide is no longer useful. Return it to the woods where you shot the deer, and mice, birds and numerous other critters will gladly use the hair for their beds and nests. Or you can keep the hide and decorate with it. We proudly display the hides, skulls and antlers from deer we've shot in our homes and offices. Such mementos allow us to relive the hunts over and over again.



## THE REALITY OF SEX RATIOS



Deer sex ratios are a common topic of conversation among whitetail hunters. Other than deer density, few subjects ignite controversy as quickly as a discussion of the number of does per buck in any given parcel of woods. Hunters routinely provide opinions on the sex ratio of the deer herd where they hunt and then compare that ratio to herds in other areas or regions. There are many misunderstandings regarding sex ratios, so we'll clearly define what they are, how they are measured, and what they mean to your management program.

The term sex ratio can be used to compare the number of bucks and does of all ages in a population, or it can be used to compare the number of antlered bucks and antlerless deer. It can also be used to compare the number of adult bucks and adult does, as well as others. Given the possible uses of the term, it's important to clearly define what you're referring to when discussing this subject. The definition we'll use is the number of adult does for each adult buck in the population. The number includes deer 1½ years and older (all deer except fawns) and describes the population immediately preceding the hunting season. When comparing ratios, make sure you

*Observed ratios are generally skewed toward does because during hunting season antlerless deer (does and fawns) are often more viewable than bucks. Also, in areas of high buck harvest the actual and observed sex ratios truly can dramatically favor does during and following the hunting season. However, this likely was not the case prior to the season.*

are referring to pre-hunt adult sex ratios. These are the ratios biologists most often refer to, and they should not be confused with observed ratios or post-hunt ratios as the latter are nearly always heavily skewed toward antlerless deer.

Observed ratios are generally skewed toward does because during hunting season antlerless deer (does and fawns) are

often more viewable than bucks, and many hunters inadvertently consider fawns as adult does. Also, in areas of high buck harvest the actual and observed sex ratios truly can dramatically favor does during and following the hunting season. However, this likely was not the case prior to the season.

Hunters, outdoor writers, and even biologists often refer to 10:1 or 15:1 doe:buck ratios. These cannot be pre-hunt adult ratios because as long as the deer herd is reproducing and recruiting fawns, the ratio cannot become more skewed than about five does per buck. The biological maximum is roughly 5:1 because even in the absence of doe harvest, a certain percentage of adult does in the population will die each year from old age, vehicle collisions, disease, predators, etc. Also, about 50 percent of fawns born each year are bucks, thus the sex ratio gets an annual correction when fawns are recruited. This concept is easier to understand with an example (refer also to the table on the facing page).

1) Let's say a hypothetical population contains 120 adult deer (fawns not included). We'll skew this unnaturally toward does to show how quickly deer herds can correct the sex ratio – let's say there are 100



does and 20 bucks (a 5:1 ratio).

2) During hunting season, hunters kill 90 percent (18) of the bucks and none of the does.

3) The post-hunt population is 100 does and two bucks.

4) Natural mortality is considered next. Since there are very few bucks left in the population, few will die from other causes. We'll say one of the two remaining bucks dies (50 percent). However, at least 10 percent of the does will die from natural causes.

5) The remaining population is 90 does and one buck.

6) For our example, we'll say each doe recruits 0.66 fawns (see page 17 for current fawn recruitment rate information). The fawn recruitment rate isn't the number of fawns born but the number that survive to about 6 months of age and are recruited into the fall deer population. At this rate there will be 60 fawns (about 30 bucks and 30 does; fawn sex ratios are nearly equal). These won't be added to the adult population until the following year but last year's fawns get added this year. For simplicity, we'll assume last year's population had the same number of fawns and immigration and emigration were equal.

7) Following fawn recruitment, the population has 120 does and 31 bucks (including 30 yearlings) for a 4:1 ratio.

This example is simplified, but it demonstrates that pre-hunt adult sex ratios can't become as skewed as many think (as long as fawns are being recruited). If fawns are not being recruited due to herd health, significant predation, or other issues, then the annual "correction" shown above is

reduced and the ratio can remain more skewed. However, we started this population with an unnaturally skewed sex ratio, applied an unnaturally skewed harvest to it, and still had a more closely balanced population one year later. Given a deer population's ability to correct itself, a 4:1 or even a 3:1 pre-hunt ratio should be considered heavily skewed from a biological perspective and reflects poor management of the deer population in many cases, or factors like predation. This 4:1 ratio could lead to hunters observing 10 or more antlerless deer (does and fawns) per buck during hunting season.

Conversely, just because a herd has a "good" sex ratio doesn't mean it is properly managed. Prior to antler restrictions and liberalized doe harvests, Pennsylvania was considered to be among the poorest managed states in the country. Even then, Pennsylvania's statewide pre-hunt adult sex ratio was less than 3 adult does per adult buck. The deer population was skewed toward females, but the bigger problem was nearly all of the bucks were yearlings, just like in our example. Of course, things are much improved in the Keystone State today.

There are a few methods for estimating the pre-hunt adult sex ratio, but of all of them, trail-camera surveys are far superior to the other methods, and in addition they can provide density, age structure and fawn recruitment data. A late-summer trail-camera survey is a great way to estimate the pre-hunt adult sex ratio. To help more hunters become proficient with trail-camera surveys, QDMA recently published a new book, *Deer Cameras: The Science of*

### AGE STRUCTURE MATTERS

The concept of a "sex ratio" can be misleading. When discussing sex ratios, it's also important to consider the *age structure* of the buck side of the ratio. For example, you can have two populations that both have 2:1 ratios. Let's say one population has only yearling bucks and the second has bucks from 1½ to 5½ years making up the buck portion of the ratio. Which population is better managed and which would you rather hunt? Obviously, the one with a better age structure.

*Scouting.* You can find it in "The Shed" at [www.QDMA.com](http://www.QDMA.com).

In 2008 the QDMA surveyed every state wildlife agency that managed white-tailed deer and collected data on the pre-hunt adult sex ratios for 1998 and 2008. The national average was 2.0 adult does per adult buck in 1998 and 1.9 adult does per adult buck in 2008. In 2008, pre-hunt adult sex ratios ranged from 1.1 in Connecticut and Georgia to 3.1 adult does per adult buck in Texas. You may never get a 1:1 ratio where you hunt, but well-managed herds can easily have less than two adult does per adult buck.

Do you enjoy watching bucks chase does or fight for breeding rights during the rut? Do you enjoy hearing bucks vocalize or like to grunt or rattle them in while hunting? If so, then balanced sex ratios and complete age structures have many benefits for you. Balancing these population parameters increases competition for breeding, which improves your opportunity to witness vocalizing and chasing or fighting while afield, and thus increases the likelihood of seeing bucks within range of your deer stand.

Two goals of Quality Deer Management are to balance deer herds with the habitat and have bucks of many ages in the population. By accomplishing these goals you obtain balanced sex ratios (2:1 or better) with complete age structures for bucks and does. So, the next time you ask about sex ratios, be sure to follow that question up with another about the age structure of the herd.

#### Self-Correcting Sex Ratios

This example shows how even a poorly managed deer population can come close to correcting its own doe:buck ratio each year through fawn recruitment.

|                        | No. of Does | No. of Bucks | Sex Ratio | Comments                      |
|------------------------|-------------|--------------|-----------|-------------------------------|
| 1 Pre-hunt Population  | 100         | 20           | 5:1       | Starting ratio                |
| 2 Hunting mortality    | -0          | -18          |           |                               |
| 3 Post-hunt Population | 100         | 2            | 50:1      | Heavily skewed after the hunt |
| 4 Natural mortality    | -10         | -1           |           |                               |
| 5 Remaining Population | 90          | 1            | 90:1      | Even more skewed              |
| 6 Fawn recruitment     | +30         | +30          |           |                               |
| 7 Pre-hunt Population  | 120         | 31           | 4:1       | Better than when we started   |

## OVERVIEW: QDMA'S REACH PROGRAM

In early 2006, the Quality Deer Management Association unveiled their exciting new REACH Program. REACH is an aggressive national education and outreach program designed to benefit hunters, landowners, and deer managers in several ways. REACH is the acronym for Research, Educate, Advocate, Certify, and Hunt. The program specifically addresses all of QDMA's core mission elements and was developed with input from QDMA members, state agency personnel, conservation leaders, and QDMA staff and National Board members. QDMA's goals for the program are ambitious, and they will directly benefit all QDMA members. Here is a brief synopsis of each element of REACH.

### RESEARCH

Since 2006, the QDMA has greatly expanded its role in designing, influencing, conducting, and funding research on practical projects impacting white-tailed deer biology, ecology, management, and hunting. QDMA's stance on deer management issues is based on good science, and good science comes from research. The first major accomplishment with this element of REACH occurred in May of that year when the QDMA announced they had secured a \$50,000 grant for a cooperative project between the Pennsylvania

Cooperative Fish and Wildlife Research Unit at Penn State University and the Pennsylvania Game Commission. In total, over the past six years the QDMA has secured over \$450,000 to support worthwhile research projects in over 20 states. Visit <http://www.qdma.com/programs/research/> for a complete list of QDMA-sponsored research projects.

### 2011 Research Accomplishments

- Executed a grant from the National Fish and Wildlife Foundation (NFWF) for \$21,200 to evaluate the hypothesis regarding the effects of mature males on the timing and degree of reproductive effort of young males.
- Executed a grant from the NFWF for \$26,000 to study the long-term and seasonal effects of prescribed fire on white-tailed deer habitat in mixed hardwood forests (see below).
- Continued multi-agency project with the U.S. Fish and Wildlife Service - National Wildlife Refuge System, National Park Service, Concordia University and the Minnesota Department of Natural Resources investigating impacts of human population growth and habitat fragmentation on deer hunting and management.
- Continued genetic study of white-tailed deer to provide essential knowledge to

guide chronic wasting disease (CWD) management efforts. DNA analysis is being conducted by researchers at Texas A&M University-Kingsville on deer samples collected in the CWD endemic area in West Virginia.

- Secured \$49,298.50 from the NFWF to support a project to develop Wildlife Management Cooperatives in the Northeast, Midwest and West.

### EDUCATE

Educate – QDMA also has expanded educational opportunities and activ-

### REACH in the NEWS: 2011

#### The Ultimate Whitetail Reference

The most comprehensive reference guide to whitetails published in more than 20 years is now available. *Biology and Management of White-tailed Deer*, a 696-page, hardcover book, covers the evolutionary history of the whitetail; its anatomy, physiology, and nutrition; population dynamics; and ecology across its vast range. The text also presents a history of management beginning with Native Americans. The book also provides information on modern management techniques that can be used by both professional and lay managers.



Edited by Dr. David G. Hewitt of the Caesar Kleberg Wildlife Research Institute at TX A&M University/Kingsville, the book includes contributions from numerous deer researchers and professional managers. QDMA co-sponsored the book's publication, and QDMA staff members – including Brian Murphy, Kip Adams, and Joe Hamilton – were contributing authors on the project.

*Biology and Management of White-tailed Deer* provides practical knowledge for your QDM program as well as an impressive addition to your library of favorite hunting and deer-management books. Order from QDMA for \$119.95, which includes a CD-ROM with color illustrations. Call 800-209-3337 or visit [QDMA.com](http://QDMA.com) to order.

### REACH in the NEWS: 2011

#### Research Conducted on Effects of Seasonality of Fire in Mixed Hardwoods

Prescribed fire is commonly recommended to enhance habitat conditions for white-tailed deer and other wildlife species. More landowners are using fire than in past years, primarily to manage early succession and pine stands. Research from the past 10 to 15 years has documented usefulness of fire in hardwoods to improve wildlife habitat and overall forest health. Relatively low-intensity fire can be used in upland hardwoods without harming the overstory. Most of the research investigating fire in hardwoods has been from short-term studies, determining the effects of only 1 or 2 burns, yet none of this work has investigated long-term fire effects related to timing of burning

in hardwoods. Early growing-season fire and dormant-season fire in hardwood stands promote sprouting of woody stems and perpetuate vegetation composition dominated by woody species. Habitat quality could be improved by decreasing woody competition and increasing the herbaceous component in the understory. The researchers are documenting the effects of early growing-season fire and late growing-season fire in upland mixed-oak forests and measuring soft mast availability and forage for white-tailed deer. Data collected will relate to both wildlife habitat quality (food and cover available) and regeneration potential within upland hardwood systems. Information gained from this work should be applicable over a considerable portion of the eastern United States where upland hardwood systems occur.



ities on deer management and habitat improvement for QDMA members, natural resource professionals, and the general public. QDMA continues conducting seminars, workshops, and short courses and also now provides interested parties web-based information, as well as new books, charts, DVDs, and posters.

### 2011 Education Accomplishments

- Conducted over 250 educational events in nearly 30 states and 3 Canadian provinces.
- Published QDMA's 2011 *Whitetail Report*, an annual report on the status of white-tailed deer, the foundation of the hunting industry in North America (available at QDMA.com).
- Wrote chapters for the new reference guide to whitetails entitled: *Biology and Management of White-tailed Deer* (see the facing page).
- Began producing the Community Version of "Living with White-tailed Deer" suburban educational program.
- Conducted nearly 50 radio, newspaper, magazine, and TV interviews throughout North America.
- Hosted the 11th Annual QDMA National Convention in Nashville, TN. This was the most successful convention to date with new records set in many areas!
- Featured QDMA staff biologists as speakers in five separate web-based educational seminars for Penn State University and the American Tree Farm System.

### ADVOCATE

Advocate – Over the past six years the QDMA also increased its involvement in whitetail hunting and management issues at the state and federal levels. Education and Outreach Directors serve as liaisons between QDMA members/Branches and their respective state and federal agencies. This strengthened QDMA's ties with its members, state and federal agencies, conservation organizations, and other stakeholders. Since 2006, the QDMA has engaged in over 350 legislative and management issues.

### 2011 Advocacy Accomplishments

- Engaged in 50 policy, regulatory or management issues at the national level and in 16 states (AL, FL, ID, IN, KY, MD, ME, MI, MN, MO, NY, PA, SC, TN, VA, and VT) including:
- Provided input to congress on Farm Bill authorization and funding (see sidebar).
- Served as a member of the Deer Management Stakeholders Committee in Florida.
- Thanked Rep. Hagedorn from Idaho for sponsoring HB 85 that allowed the Fish and Game Council to establish a mentored hunting program.
- Provided input on Mine Land Steward Initiative to Appalachian Wildlife Foundation.
- Supported HB 4371 and SB 207 in Michigan to eliminate the minimum hunting age and create a mentored youth hunting program for those under the age of 10.
- Submitted letter opposing lifting Michigan's baiting and feeding ban and supporting increased fines for violations and increased use of food plots on state lands.
- Opposed the Minnesota DNR's loss of authority over the antler restriction program and other deer management tools as stated in SF 943.
- Supported HB 1760 which would allow hunting on Sunday in Pennsylvania.

### REACH in the NEWS: 2011

#### QDMA Active in Partnerships for Conservation

The QDMA joined numerous organizations through the American Wildlife Conservation Partners and the Theodore Roosevelt Conservation Partnership in support of continued funding by the U.S. House of Representatives for important conservation programs including: the North American Wetlands Conservation Act, the Land and Water Conservation Fund, the Wetlands Reserve Program, Forest Legacy, the Cooperative Endangered Species Conservation Fund, the National Fish Habitat Action Plan, and State Wildlife Grants.

- Opposed HB 3049 in South Carolina which would have changed the current structure of the DNR.
- Opposed the proposed legislation (HB 1112/SB 1568 – the White-tailed Deer Breeding and Farming Act) which was introduced to the Tennessee General Assembly.
- Opposed SB 868 in Virginia which would allow landowners or their designees to kill deer, elk or bears in the act of damaging fruit trees, crops, livestock or personal property at will without DGIF confirmation of damage. The bill was defeated.
- Provided input on deer season proposals in numerous states.
- Attended major deer conferences in the Southeast (Southeast Deer Study Group), Midwest (Midwest Deer Study Group), and the Northeast (Northeast Deer Technical Committee).

### CERTIFY

Certify – QDMA created an individual certification program that includes three levels of potential achievement, and each must be completed in sequence. Deer Steward I provides a comprehensive understanding of the key principles of deer and habitat biology, ecology, and management. Deer Steward II teaches students how to apply the principles learned in Level I through hands-on and field experience. Finally, Deer Steward III, the most prestigious, must be earned through an individual's long-term service to white-tailed deer and/or the QDMA. The QDMA also unveiled a land certification program and on-line version of Deer Steward at the National Convention in 2011 and plans to launch these programs early in 2012. The goal of these programs is to create more knowledgeable hunters and managers and to have improved deer herds and habitats.

### 2011 Certification Accomplishments

- Conducted three Deer Steward I courses and had 143 students attend from 27 states, Washington D.C., and one Canadian province.
- Conducted two Deer Steward II courses and had 51 students from 18 states attend.

- The Land Certification Program was unveiled at the 2011 National Convention.
- On-line Deer Steward Program was unveiled at the 2011 National Convention.
- One-day training courses to qualify Land Certification property inspectors were conducted in TN and PA.
- QDMA received the first installment of the \$50,000 grant from Budweiser and the National Fish and Wildlife Foundation, resulting from Joe Hamilton's 2011 Budweiser Conservationist of the Year Award, to be directed to QDMA's Land Certification Program.

## HUNT

Hunt – Finally, QDMA launched a national mentored youth hunting program, which provides a framework to unite mentors and youth and is designed to create new long-term hunters. The program incorporates multiple recreational pursuits and is superior to “one time” events designed to expose (vs. mentor) newcomers to the sport. The official name of the program is the QDMA Mentored Hunting Program (MHP), and it is strongly recommended for adoption by QDMA Branches, QDMA members, and any individual or group interested in recruiting new hunters. It emphasizes the development of woods skills, wildlife knowledge, hunter safety,

## REACH in the NEWS: 2011

### QDMA's Youth Education and Outreach Program Receives Financial Boost

The inaugural fundraising event to support the Youth Education and Outreach Program was held on April 28, 2011, in North Carolina. Event coordinators were Judge Holdford, Wooten “Dog” Lamm, and Scott Griffin (owner of Shellhouse Mansion Plantation, site of the event). Invitations were mailed to a select group of approximately 25 prospective donors including friends, business associates, and neighborhood landowners. The event involved a \$250/plate dinner preceded by a social and a message about the proposed Youth Program by QDMA Founder and Director of Development Joe Hamilton. Donations from the evening's event totaled \$20,000.

The event was a resounding success on several fronts. In addition to the invaluable seed funds for QDMA's Youth Education and Outreach Program, this event is expected to set the stage for similar fundraising events in selected areas throughout the whitetail's range.



QDMA's Joe Hamilton congratulates Scott Griffin for hosting a successful fundraising event for the Youth Education and Outreach Program. Judge Holdford (back left) and Wooten “Dog” Lamm served as event organizers/supporters.

At QDMA's National Convention in Nashville, Tennessee, the Midlands Branch from Columbia, South Carolina, pledged \$5,000 to the Youth Education and Outreach Program and challenged other Branches and individuals to step to the plate in support of this worthy program. That evening, an additional \$17,000 was received from the Thumb (Michigan) and Southeast Pennsylvania Branches and from other pledges and donations to provide a financial boost to the development of this exciting new program.

## REACH in the NEWS: 2011

### Nearly 550 Deer Stewards!

The QDMA's Deer Steward Certification program is a personal educational experience designed to offer landowners, hunters, and natural resource professionals an opportunity to learn from the Nation's top experts about QDM. The first two Levels are courses, Level III is an application; all three need to be taken in succession. By taking Levels I and II, graduates are able to design and implement their personal comprehensive property-specific white-tailed deer management plan. Level III is an honor earned after giving back to the resource over a long period of time, rather than something you can attain from a course.

To date, nearly 550 individuals have



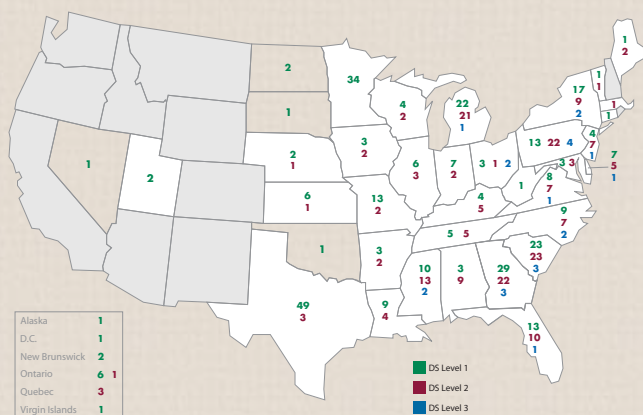
Field education plays a role in Levels I and II of QDMA's Deer Steward courses. These Level I Deer Stewards visited comedian Jeff Foxworthy's Georgia farm in 2011.

participated in the Deer Steward program, with 324 Level I, 199 Level II, and 23 Level III graduates, representing 36 states and the Nation's capitol, three Canadian provinces,

and one U.S. Virgin Island. Since 2007, the QDMA has held 14 Level I classes and eight Level II classes in the following states: DE, GA, IL, IN, MD, MI, MN, MO, MS, NY, PA, SC, and TX.

To learn more about the Deer Steward Certification program, or to register for an upcoming course, visit [www.QDMA.com](http://www.QDMA.com).

QDMA Deer Steward Certification Graduates





and shooting skills. Small game and white-tailed deer hunting are both integral parts of the program. Skills are learned and discussed throughout the calendar year and may be reinforced in subsequent years. This is an excellent program that helps combat the declining youth recruitment rates across the country. To accompany the MHP, the QDMA also unveiled the new Youth Education and Outreach program at the 2011 National Convention.

### 2011 Hunting Heritage Accomplishments

- QDMA's Youth Education and Outreach program was unveiled at the 2011 National Convention. The program is a fun, enriching youth program that exposes youth to hunting, deer and habitat management, conservation and QDMA.



- Hired a Manager for QDMA's Youth Education and Outreach program.
- QDMA Branches held hunts for hundreds of youth, physically challenged and military personnel.
- Additional mentors and students engaged in QDMA's Mentored Hunting Program.
- Conducted our annual National Youth Hunt in Georgia that involved 10 young hunters from the following six states: IL, KY, MI, MN, OK, and SC (see the photo at left).
- QDMA Branches contributed nearly 20 tons of venison (representing 160,000 meals) to venison donation programs and soup kitchens across the Nation.

## 2010 HONOR ROLL OF DONORS

THE FOLLOWING WERE GENEROUS DONORS DURING 2010 TO QDMA'S REACH PROGRAM OR ENDOWMENT FUND.

QDMA's REACH program is made possible in large part by the generous donations of many of our supporters. Numerous people and groups make annual

donations. Below are the names of those who donated to QDMA in calendar year 2010 (the most recent year available as a complete list for this report). QDMA is

grateful to these donors for their support, which makes it possible for QDMA to continue pursuing our research, education, advocacy, certification, and hunting goals.

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Mike Weaver  
Thomas L. Whaley  
Robert Wilder  
Charlie G. Wilson  
Ed Wilson  
Richard G. Wolfe  
Patricia A. Wright  
Tommy Wright

Numerous other individuals  
and companies made  
donations of products  
or services to QDMA  
fundraising events in 2010.

## NEW PROGRAMS IN 2012: THE RACK PACK!

In 2011, QDMA unveiled its Youth Education and Outreach Program at its National Convention in Nashville, Tennessee. This new program will be officially launched in 2012. It is a fun, enriching and engaging youth program that exposes youth to hunting, deer and habitat management, conservation and QDMA. It will provide the necessary structure and support for QDMA Branches and members to deliver key components of the program at the grassroots level. The program is targeted for 10- to 15-year-olds, but youth younger than 10 and older than 15 are encouraged to participate.

QDMA established a 16-member steering committee consisting of QDMA board members and staff, Branch/State Chapter members, a representative from a national marketing firm, and three

youth representatives. The committee contained a valuable mix of backgrounds and expertise, and included members from the Southeast, Mid-Atlantic, Northeast, Midwest and Southwest regions of the United States.

Youth will have the option to become a member not by paying but by “earning” their membership through an online Webquest, essentially a challenging hunt for facts about whitetails, deer hunting, and QDM. Passing will provide them entry into the “Rack Pack.” The Rack Pack is the membership portion of the program, and it will provide additional opportunities and benefits to its members. The Rack Pack name was identified by youth during the focus groups as the clear favorite from numerous choices, and they also selected The Rack Pack logo.

Major features include:

**Youth Program Website:** This will serve a vital role in connecting youth to the program as well as with each other.

**QDMA Conservation Kit:** QDMA will create a conservation kit for Branches to use at youth events.

**New/Young Hunter Guide to Deer Hunting and QDM:** Despite thousands of books on deer hunting and management, there is no modern, comprehensive guide to deer hunting for new or young hunters. QDMA plans to produce one.

Other elements include a scholarship program, quiz-bowl teams, youth camps, a youth “Deer Steward” program, and more. QDMA has hired a full-time manager for the new program, Daniel Bartley. For more information, contact Daniel (dbartley@qdma.com) or visit QDMA.com.

## NEW PROGRAMS IN 2012: LAND CERTIFICATION

In 2012, QDMA will launch its new Land Certification Program (LCP). The LCP was created in response to numerous member and landowner requests. Collectively, these individuals sought a means to: Determine if the property they owned, leased or managed met a baseline Quality Deer Management (QDM) standard; and receive specific management recommendations on their hunting property from qualified QDM professionals; and promote QDM in their area by displaying

a sign that recognizes their efforts.

The LCP was developed to recognize the accomplishments of landowners and sportsmen implementing the Four Cornerstones of QDM throughout North America, as well as those committed to ethics, conservation and biodiversity through land stewardship. The LCP will also encourage management practices on participating lands that will enhance deer and other wildlife species, habitat conditions, and hunting experiences by provid-

ing incentives and/or assistance.

The LCP is a multi-level, voluntary process which evaluates one or more properties against an established list of standards. Three categories of achievement are outlined in the program, including Pledged Lands, Certified Lands and Legacy Lands. Criteria are established for each level of achievement.

For more information contact QDMA Certification Program Manager, Matt Ross (mross@qdma.com), or visit QDMA.com.

## NEW PROGRAMS IN 2012: ON-LINE DEER STEWARD COURSES

In the sixth year of the Deer Steward certification program, QDMA's popular educational series will offer the option to take the first Level on-line.

Through a unique partnership with Clemson University, individuals who have a high-speed internet connection (and the Mozilla Firefox web browser) also can choose to enroll in the Level I class on-line, making Deer Steward as convenient and affordable as it's ever been! Once registered, attendees gain access to a digital recording of one of our previous Deer

Steward Level I courses (filmed in front of a live audience) and will have up to 180 days to complete the series of six sessions (approximately 17 one-hour topics) at their own pace. Speakers include Kip Adams, Dr. David Guynn, Joe Hamilton, Dr. Craig Harper, Dr. Karl V. Miller, Brian Murphy, Matt Ross and Dr. Grant Woods.

Just like the in-person classes, registrants must pass an exam to graduate, and Continuing Forestry Education (CFEs) credits from the Society of American Foresters will be available; as well as the

opportunity to take the course for college credit (3.0 hours) through Clemson. Graduates of online Deer Steward will be eligible to take one of the in-person Level II courses upon completion.

Details will be posted at QDMA.com. Those who choose to enroll in the on-line version of Deer Steward Level I can do so at \$200 for non-members, \$175 for QDMA members, and \$150 for Life and Sponsor members (on-line fees increase \$50 with CFEs).



## QDMA WINS NUMEROUS HONORS & AWARDS IN 2011

### Budweiser Conservationist of the Year

QDMA founder Joe Hamilton of South Carolina was named the 2011 Budweiser Conservationist of the Year, an honor bestowed through an open public vote that elected Joe from among four national finalists. The award included a \$50,000 grant from the National Fish and Wildlife Foundation, which Joe chose to give to the organization he founded in 1988 to ensure the future of white-tailed deer, wildlife habitat and our hunting heritage.

"The \$50,000 donation from the National Fish and Wildlife Foundation will enable the QDMA to devote more energy and attention toward educating, nurturing, and guiding the future stewards of our precious natural resources," said Joe.

In accepting the award at the National Shooting Sports Foundation's 2011 SHOT Show in Las Vegas, before a crowd of thousands at Outdoor Channel's Golden Moose awards event, Joe held high his 42-year-old copy of "A Sand County Almanac" by Aldo Leopold. He cited Leopold for fathering the conservation movement that gave rise to the modern hunting industry, and he pointed out that North America's most



popular game animal, the white-tailed deer, is now the pillar that supports that industry.



### Brian Murphy In "Outdoor Life 25"

Each year for the last four years, *Outdoor Life* magazine has named the "Outdoor Life 25" – men and women who have a significant positive impact on hunting and fishing, moving our sports forward and making them enjoyable for everyone. In 2011, QDMA CEO Brian Murphy was named one of the "OL 25."

### QDMA Board Member Honored

QDMA National Board member Austin Musselman and his wife Layla, of Kentucky, were honored in 2011 with the prestigious Wildlife Conservationists of the Year award from the Kentucky Wildlife Federation Foundation (KWFF). The KWFF is a non-profit organization dedicated to developing, maintaining and publicly recognizing wildlife conservation education and achievement in Kentucky.



QDMA staff members accept the Southeast Deer Study Group's 2011 Career Achievement Award. Left to Right: Lindsay Thomas Jr. and Matt Ross of QDMA; Dr. Steve Demarais of Mississippi State University (Deer Committee chairman); Joe Hamilton, Brian Murphy, and Kip Adams of QDMA.

### QDMA Receives Career Achievement Award from the S.E. Deer Study Group

While the Southeast Deer Study Group's Career Achievement Award can be presented to individuals or associations, QDMA is the first group to receive the award since it was created in 1996. Previous winners include Dick Harlow, David Guynn, Joe Hamilton and Bob Downing of South Carolina; Larry Marchinton and Kent Kammermeyer of Georgia; Harry Jacobson of Mississippi; Charlie DeYoung, Bill Armstrong and Bob Carroll of Texas; Jack Gwynn of Virginia, and Dave Samuel of West Virginia.

The Southeast Deer Study Group is a subcommittee of the international nonprofit The Wildlife Society ([wildlife.org](http://wildlife.org)), a professional association dedicated to excellence in wildlife stewardship through science and education.

### "Deer Cameras" Receives POMA Pinnacle Award

QDMA's book *Deer Cameras: The Science of Scouting* was honored by the Professional Outdoor Media Association (POMA) with a 2011 Pinnacle Award in the book category, POMA's top award for excellence in craft.





# WhitetailReport

## 2011 QDMA CONSERVATION AWARDS



Larry Williams (left) accepted the **Agency of the Year** award for the U.S. Fish & Wildlife Service. QDMA CEO Brian Murphy presented the award in recognition of USFWS support on deer research, the formation of QDM Cooperatives around federal lands, and more partnerships now being developed.



Dr. Karl V. Miller of the University of Georgia received the **Al Brothers Professional Deer Manager of the Year** award. One of 37 Charter Life Members of QDMA, Karl continues to lead cutting-edge research into deer management and ecology. He accepts his award from QDMA Board Chairman Mark Thomas.



Sgt. Lynwood Kearse (left) of South Carolina earned the **Wildlife Officer of the Year** award. A wildlife officer for 25 years, Sgt. Kearse heads the "Take One, Make One" program which paired 34 youth hunters with adult mentors in 2010 alone. He also helps organize hunts for veterans and other groups.



Stu Lewis (right) of South Carolina earned the **Al Brothers Deer Manager of the Year** award. A Life Member and one of the first two people to achieve Deer Steward Level III status, Stu shares his hunting land with youth, veterans, college students and mobility-impaired hunters. Stu accepted the award from QDMA Board member Dr. David Guynn.



Dr. Grant Woods (right) of Missouri received the **Joe Hamilton Lifetime Achievement Award**, which was presented by QDMA founder Joe Hamilton. As a research wildlife biologist, consultant, speaker and communicator, Grant is one of the most well-known deer experts and advocates of the QDM philosophy in North America. He now also teaches hunters about QDM through his Web broadcast, GrowingDeer.tv.



Whitetail Properties won the **Corporate Achievement Award**. Whitetail Properties emphasizes land stewardship and wise management of whitetails in all their communications. They have continuously promoted QDMA in their broadcasts, and have even offered their video production talents to create QDMA commercials and video elements for QDMA's National Convention. They are also partnering with QDMA to produce a DVD on aging and judging whitetails in the field. Here, Dan Perez (black shirt) and his team accept their award.



Freelance writer and editor Patrick Durkin of Wisconsin (right) received the **Signpost Communicator of the Year** award from QDMA Director of Communications Lindsay Thomas Jr. The award recognizes outstanding efforts to share accurate, reliable information about deer and deer management with hunters.



## 2011 QDMA BRANCH ACHIEVEMENT AWARDS



Two awards went to the Central Louisiana Branch of Alexandria: **The Branch of the Year** award, and the **Fundraising Branch of the Year** award. This Branch has hosted the largest QDMA fundraising event in the country four of the last five years. In 2010, more than 500 people attended their annual REACH Banquet, and net proceeds exceeded \$50,000. Additionally, the Branch provides funding and expertise to numerous community outreach programs, many of which are focused on youth through 4-H, youth hunts and the National Archery in the Schools Program (NASP). Left to right: Tammy Lemoine, vice president; Darren Boudreaux, secretary; Junior Price, treasurer; Bob Stevens, president; J.B. Wynn, QDMA Regional Director; Richard Dupuy, Branch board member; Dayton McCann, Branch board member.



Paul Plantinga of Michigan accepted the **Volunteer of the Year** award from QDMA Board member Leon Hank. A QDMA Life Member with Michigan's Thumb Area Branch, Paul has been a Branch president, leader at the State Chapter level, and a driving force behind his Branch's successful fundraising. He is a Level II QDMA Deer Steward and helped form one of the largest QDM Cooperatives in the nation.



Arthur Dick of North Carolina (left) accepted two awards, the first for **Educational Branch of the Year** for the Cape Fear River Branch. The second was **Branch Event of the Year** for the North Carolina State Chapter's "Cape Fear River Expo," attended by more than 8,000 people with a special emphasis on youth fun and education. Arthur accepted the award from QDMA Board member Dr. Bill Eikenhorst.



For the third year in a row, the Midlands Branch of Columbia, South Carolina won the **Sponsor Membership Branch of the Year**. In 2010, the Branch sold 68 sponsor membership tickets to their REACH Banquet (In 2011, they broke their own record again with more than 70!). Left to right, Regional Director Kevin Graves, "Snookie" McCullar, Branch president Alan Brock, Joel Wilson and Coke Floyd.



The Foothills Branch of Greenville, South Carolina was the **New Fundraising Branch of the Year**. Right out of the gate, this new Branch held a very successful first REACH Banquet, raising net proceeds in excess of \$19,000. Left to right: QDMA Board member Louis Batson, Elizabeth McMillian, John Stillwell, Branch president Everett McMillian, John Tompkins, and QDMA Board member Dr. David Guynn.



Alan Bruno (left) of the **Southwestern Ontario Branch** of Canada accepts the New Branch of the Year award from QDMA-Canada Regional Director Matt Ross. In their first year, the Branch worked shows and meetings, hosted three educational events, launched unique raffles, and made significant progress toward improving relations between QDMA and the Ontario Ministry of Natural Resources.

## MAJOR QDMA BRANCH EVENTS FROM 2011

### Kentucky QDMA Branches Work Together

QDMA Branches from all across the Mid-America Region, and specifically those in the state of Kentucky, banded together and held a Spring Tree Drive, distributing over 10,000 free oak trees (red and white oak varieties) to interested landowners. Seven thousand trees were distributed by one Branch alone (Barren River Branch in Bowling Green, KY). In addition, the Derby City Branch from Louisville, KY and the Bourbon Trail Branch from Elizabethtown, KY combined efforts and hosted a 3-day youth hunt with a total of 31 participants. The criterion for that hunt was that their parents had to be active duty military personnel.

### West Central Michigan Branch starts QDM Cooperative with Grand Rapids Nature Center

In the fall of 2011, the West Central Michigan Branch of QDMA partnered with the Grand Rapids Wheelchair Sportsman's Association to hold an archery antlerless deer hunt at the Blandford Nature Center (BNC). The Branch convinced the BNC to adopt a long-term whitetail management strategy based on the principles of QDM and the BNC Whitetail Management QDMA Cooperative was born. The BNC is a 143-acre natural "oasis" and independent non-profit community education center located within a very urban area, straddling the Cities of Grand Rapids and Walker, Michigan. On September 25, 2011 The BNC Cooperative held its third hunt in two years — and its very first youth hunt. The youth hunt was facilitated with help from The West Central Michigan Branch of QDMA. Deer harvested during the hunt were donated to the Michigan Sportsman Against Hunger Program, which connects hunters, processors and charities together to help feed the hungry throughout Michigan.

### North Carolina State Chapter and Bladen Lakes Branch

The Cape Fear River Branch, in coordination with the NC State Chapter and Bladen Lakes Branch of QDMA, organized and supported 4 distinct educational activities at the Cape Fear Wildlife Expo in Wilmington, NC in March 2011. The first, a program entitled "Kids Gone Wild" offered academic level workshops to youth age 10-17, covering a variety of outdoor-related topics. More than 400 youth attended from public and private schools. Second, a program entitled "Wild Child Scavenger Hunt" was also organized by the QDMA Club at North Carolina State University and held at the Expo - literally thousands of youth and their families explored wildlife and investigated wildlife concerns in North Carolina through wildlife fun facts. Third, the "Cape Fear Wildlife Expo Seminar Series" offered a wide array of sportsman and outdoor enthusiast seminars, delivering practical, skills-based topics designed to promote both hunting and other outdoor sports. From this, three topics were delivered by QDMA volunteers: Wildlife Sounds, Hunter 101, and Food Plots. Finally, the "QDMA Wildlife Practical", a hands-on learning activity enjoyed by youth and adults alike, was put into action spreading our mission to approximately 5,000 sportsmen and women attending this event.

### Cape Fear River Branch in North Carolina

Working with the County Park Management, the Cape Fear River Branch planned and managed a spring shed antler hunt on the 680-acre Harris Lake Park public use property, delivered a QDM overview as a public seminar, and conducted a late summer camera survey to help the park system estimate deer herd size and identify potential deer herd issues. This property is in Wake County near Raleigh.

### South Carolina Forestry Commission/QDMA Military Appreciation Hunt

The second outreach deer hunt of the season was held at

the 1,600-acre Niederhof Forestry Center in Tillman, SC on October 26-28, 2011. The SCFC partnered with the QDMA for the Military Appreciation Hunt which included two Fort Jackson soldiers, three members of the SC National Guard, and two hunters who purchased the hunt by auction at QDMA meetings in Greenville and Columbia. State Forester Gene Kodama shared the importance of forestry to South Carolina with the group in the traditional orientation while QDMA founder Joe Hamilton presented a power point program on "Aging Whitetails on the Hoof" with notes on selective harvests of bucks and antlerless deer. Niederhof Forestry Center Manager Chris King gave the history of the property and an explanation of seed orchards there. Meals for the hunters were supplied by the QDMA's Midlands Branch and the ACE Basin Branch. QDMA member Alton Hutto provided a steak lunch for the hunters on Friday before they departed Niederhof. The ACE Basin Branch also donated a 10-foot tower stand, spotting scope, and a QDMA membership for each soldier who participated in the hunt. The QDMA National Headquarters donated \$500 to the Fort Jackson Family Readiness Group on behalf of the Forestry Commission.

### Mid-Carolina Branch Hosts Youth Hunt

On October 21st and 22nd, 2011, the Mid-Carolina Branch held its third annual Daniel Douglas Memorial Youth Hunt in Silverstreet, SC to honor Daniel Douglas Jr. whose life was taken at a young age in a tragic accident in 2008. In attendance were seventeen boys and girls comprised of first time hunters, those with handicaps, and returning hunters previously struck by the "whitetail bug"! The hunt began on Friday afternoon with a safety briefing by Sgt. Lynnwood Kearse with the SCDNR's "Take One, Make One Program" and the QDMA's 2011 Wildlife Officer of the Year. The group departed with their guides for the afternoon hunt which produced six harvested deer. The successful hunting continued the next morning and with a little chill in the air and a beautiful sunrise the kids demonstrated how to pursue the allusive whitetail, as eight additional deer were harvested! Several of these deer were taken by first time hunters. There were no misses, and the fine shooting was attributed to the "Day at the Range" event hosted by the Branch three weeks earlier. This Day at the Range serves as an educational event with instruction on how to shoot a rifle, shot placement, gun safety, as well as field etiquette.

### Lake Country Branch of Wisconsin Donates NASP

The Lake Country Branch has funded and will help teach the National Archery in Schools Program (NASP) at St. Matthews Lutheran School in Oconomowoc, Wisconsin. Two teachers from St. Matthews along with Brian Hall (Lake Country Branch president) attended and completed the training program to become certified to teach the NASP. They will be implementing the program for grades 4 through 8 in the fall of 2011. St. Matthews will start by competing with other schools in Wisconsin via the Internet where schools list their scores online. In the future the goal is to compete at the national level depending on the interest level of the kids.

### Northeast Michigan Branch Televises Deer Necropsy

The QDMA's Northeast Michigan Branch held its winter health check at the Turtle Lake Club (TLC) in northeast Michigan, and for the second year in a row televised the entire event via the internet as a webcast. The TLC holds the distinction of being at the very heart of the bovine tuberculosis outbreak of the mid '90s and today is making great strides in herd health and habitat health through practicing QDM under the direction of property manager Wayne Sitton. Members of the TLC, Northeast Michigan QDMA members, Dr. James Kroll and Michigan's state veterinarian, Dr. Steve Schmitt have gathered at the club to perform necropsies on as many as 100 antlerless deer taken in mid-winter. This year the

entire necropsy was shown live for students at Stephen F. Austin University, as well as for any interested individual on the Internet. One of the 59 deer harvested in 2011 displayed signs of possible bovine tuberculosis but turned out to be negative. The pathology report confirmed that she suffered from cysticercosis (echinococcus granulosus), a disease common to wolves which came as a surprise considering the lack of a local wolf population.

### Maryland Fetus Study in 2011

Maryland State Chapter secretary and Bachman Valley Branch vice president Sheri Winter applied lessons learned from the Deer Steward II class at Chesapeake Farms, Maryland and measured fetuses collected from the last managed hunt for the 2011 fetus study. Cheri, Ray Tully, Tommy Leach, Roland Cox, and E. W. Grimes assisted other county volunteers at the evisceration station while collecting biological data. This concludes all state and county deer-management hunts (eight locations total) where data will be collected as part of the three-year fetus study conducted by the Maryland State Chapter. In the end 462 deer samples, along with crop damage permits harvest data from QDMA members, will be compiled for the 2011 fetus study. Then this year's data will be compared to previous year's data and used to chart trends of Maryland's timing of the rut. This collected data will be given to Maryland's Deer Project Leader as part of annual biological data collection. The Maryland State Chapter fetus study report will be available approximately late March 2012 and information will be posted on [www.marylandqdma.com](http://www.marylandqdma.com).

### Thumb Area Branch Donates to Law Enforcement

On April 2 members from Michigan's Thumb Area Branch presented cameras and spotlights to Conservation Officers (COs) from the Michigan Department of Natural Resources (MDNR). The three digital video recorders and five spotlights will be used by the COs responsible for enforcing Michigan's game laws in Huron, Sanilac, and Tuscola counties. In previous years the Branch donated two digital video recorders to be shared among the COs. With this new donation, each of the five COs working in the Thumb now has their own digital recorder and a new LED spotlight. Also included in the recent donation were specially designed mounts to allow the cameras to be dash-mounted in each of the COs vehicles. In addition to the donations to the MDNR, in January the Branch announced the establishment of a reward fund in conjunction with the MDNR's Report All Poaching (RAP) reward program. In addition to the reward offered through the RAP hot line, the Branch will add a reward bringing the total cash reward to \$500 for information leading to the arrest and conviction of the person(s) responsible for selected game violations.

### Missouri Branches Support Deer Steward Class

Last May the QDMA held its Deer Steward Certification Level I course in Branson, Missouri. Attendees from 14 states and one Canadian province were treated to four days of fun and education at Bass Pro Shops Big Cedar Lodge, the Barrington Hotel and Conference Center, and Dr. Grant Woods' personal property, "The Proving Grounds." Meanwhile, members of several Missouri Branches and the State Chapter had read about what other Branches had done in the past for classes hosted in Delaware, South Carolina, and Pennsylvania, and decided to also reach out and help support and facilitate the scheduled event in their home state. The Southeast Missouri Trail of Tears Branch, the Central Missouri Branch, the Southeast Missouri Branch, and the State Chapter came together and helped financially by sponsoring one of the event's lunches. Branch volunteers also supplied truck support during the class field trip. These contributions nearly exceeded \$500 in donations. Of course, several volunteers from each Branch



also attended the class as students. This financial and physical support significantly added to the success of the program and it generously provided the attendees a great meal.

#### Central Louisiana Branch Gives Back

The Central Louisiana Branch continues to work actively with the Louisiana Department of Wildlife and Fisheries (LDWF) for the benefit of deer and deer hunters. The Central Louisiana Branch has won the "Fundraising Branch of the Year" on five occasions and utilizes its profits to support the youth and adult hunters in their local community. Recently, the Branch donated \$1,700 to the LDWF for the purpose of building box stands for youth deer hunts on Sherburne WMA and Red River WMA. Overall, ten new stands were built from the generosity of the Central Louisiana Branch. The Branch enjoys impacting and helping all of those agencies and personnel who represent the same core values as the QDMA.

#### South Louisiana Branch Holds Multiple Events in 2011

The South Louisiana Branch has had a busy spring and summer. In April, the Branch held a "Whitetail Seminar" at Idewild Research Center in Clinton, LA, that was attended by over 140 interested hunters and property managers. The event included habitat identification, predator control, a Plot Master demonstration, food plot test exhibit, and an update on the 2010-11 deer season from Scott Durham, Deer Project Leader with LDWF. Later, the Branch held their "Summer Seminar" in conjunction with the LDWF and the Louisiana State University AgCenter. Prior to the start of the meeting, a brief ceremony honoring the memory of Mr. Conrad Dauthier was performed. Conrad was the first president of the South Louisiana Branch and was a true advocate for the QDMA. Conrad's son, Chad, a former president of the Branch, was present to accept a plaque in memory of his dad. Additionally, plaques honoring Conrad were given to the LDWF to be placed inside deer stands at Sherburne WMA that were recently completed with funds donated by the South Louisiana Branch. Approximately 100 people attended another Branch seminar held at the LDWF headquarters in Baton Rouge. Three lectures were given by current and former agents of the LDWF. Topics included: Upcoming Season and DMAP changes for 2011-2012; Impacts of the 2011 Mississippi River flood on wildlife in Louisiana; and, a Shoot or Don't Shoot power point presentation. In July, Sandy Comeaux, president of the South Louisiana Branch, presented Bill Shockey, long-time committee member, with the Outstanding Volunteer Award for his many years of devoted service to the Branch and the QDMA during the 1st annual Barn Dinner held at Wyoming Plantation in St. Francisville. Over 40 people attended the invitation-only event to learn more about the South Louisiana Branch and what QDMA is all about. The guests were treated to a Cajun dinner and talks by Scott Durham with LDWF and Dr. Jim Lacour, LDWF veterinarian, who talked about feral hogs.

#### Coastal Plains Branch of Mississippi

Mississippi's newly formed Coastal Plains Branch, under the direction of Branch president Brad Roundtree, held their first annual White-tailed Deer Seminar on June 30 at the Ben Barrett County Community Center in Lumberton. Over 60 hunters and property managers listened to presentations by Don Dales with Mississippi State University College of Forestry, Justin Thayer, southern region deer biologist with the Mississippi Department of Wildlife, Fisheries and Parks, and J. B. Wynn, Southwest Regional Director for the QDMA.

#### New Brunswick Branch in Canada Gets Special Grants, Holds Symposium

The New Brunswick Branch received \$13,320 in support from the New Brunswick Wildlife Trust Fund (NBWTF) to help

finance a trail-camera survey that will help shed light on the deer population in a northern Wildlife Management Zone (WMZ) closed to deer hunting. The extreme northern part of the province has been closed to deer hunting for the past 18 years. The deer population crashed in the late 1980s to early 1990s due to many factors, including several harsh winters and an increase in the coyote population. Since then, cut backs in government have greatly limited the ability for government personnel to survey the deer population on a regular basis. To help the government improve its knowledge of the deer population in this area the NB Branch submitted a proposal that will sample the deer population through a QDMA-designed camera survey. This survey will offer detailed information on the deer population in specific localized areas. The ultimate goal is to improve the management of the deer population and eventually open a limited deer season if survey data suggests the population can support hunting.

The New Brunswick Branch also received another grant from the NBWTF to host an educational symposium for southern New Brunswick. This area of the province is home to over 12 Fish and Game clubs, and the highest density of hunters in the province. The event was hosted on Friday, October 14 at the Hampton High School auditorium and well over 100 hunters from across the southern portion of the province attended. Speakers included: Keith Beasley - of the Beasley brothers, owner/editor of Ontario Monster Whitetails magazine and the Ontario's record-book the Foundation for the Recognition of Ontario Wildlife (FROW) and host of the renowned outdoor television show "Canada in the Rough"; provincial deer biologist and QDMA Canada Board member Rod Cumberland, and Tom Byers, an agronomist and a QDMA Deer Steward graduate. Booths were also set up by Farmers and Hunters Feeding the Hungry (FHHF) - Canada and a local sporting goods retailer. The event was a resounding success as the crowd was treated to the virtues of QDM and QDMA by Tom, a glimpse into deer herd management by Rod, and then an encapsulating presentation on harvesting bruiser bucks by Keith - complete with a few sneak peeks at a few upcoming episodes from "Canada in the Rough."

#### Lake Martin Branch in Alabama

The Lake Martin Branch toured the Auburn University Deer Lab on Saturday, June 5. The Deer Lab is a 430-acre research enclosure used by Auburn University to gather information on the life of white-tailed deer. It is located at the Piedmont Experiment Station in Camp Hill, Alabama. A long-term study of the breeding habits and social relationships is being conducted by students from Auburn's School of Forestry and Wildlife Sciences. To begin the tour, Dr. Stephen Ditchkoff, Associate Professor of Wildlife Science, described the facility and showed the progression of antler characteristics and breeding success of unique bucks. The first stop in the field was a demonstration of the ability of Eco-Dogs to locate targets and assist biologists. The dogs are trained by the Auburn University School of Forestry and Wildlife Sciences and the College of Veterinary Medicine's Animal Health and Performance Program. Dogs are trained to detect scat, fungi, plants, insects, snakes, shed antlers, carcasses, burrows/nests, and fawns. Canine instructor Lucas Epperson helped Casey the dog showcase her ability to locate six-month-old bobcat scat. Chad Newbold, Research Associate, explained how the deer capture facility is used on the next stop. Pens were constructed to ease deer through a chute into individual crates where they are tranquilized. At this point, deer can be tagged and freeze branded, hair and blood are taken for disease detection and DNA testing. Scott Railey of Tecomate Seed discussed summer food plots and the effect of the drought on new plantings during the third stop. Due to the number of hunting accidents involving tree stands (five deaths during the 2010-2011 season in AL) the last stop was a demonstration on the safe use of

tree stands and safety harnesses by Lee Brown, certified Hunter Education Instructor. The tour was sponsored by the Alabama Conservation Enforcement Officers' Association, Tecomate Seed, and the Lake Marion Branch.

#### Southwestern Ontario Branch in Canada

On September 10, the Southwestern Ontario Branch of QDMA-Canada held an educational event, barbeque and 3-D archery shoot at Oxford Sportsman's Club near Ingersoll, Ontario. There were three topics presented. Branch president Alan Bruno delivered a presentation on deer vision; Brian Kerr, secretary/treasurer, gave a presentation entitled "The Value of Mature Bucks in a Population;" and, QDMA member Peter Wood of Ripple Outdoors discussed "How to Set a Buck Trap." A barbeque was enjoyed by all, and the 3-D archery shoot was won by Stuart Turner. Many thanks to all the participants who made the event a success!

#### ACE Basin Branch in South Carolina

A crowd of 120 people attended the ACE Basin Branch seminar on "Predator Control & Deer Management: A How to Seminar on Coyote Trapping" held on August 30 in Walterboro, SC. Coyotes have local deer managers very concerned, given increasing coyote populations in the area and the outcomes of recent studies on the negative impact of coyotes on fawn recruitment at the nearby Savannah River Site. Todd Menke -- Certified Wildlife Biologist for the USDA, Education Coordinator for the North Carolina Trappers Association and a featured speaker at the 2011 QDMA National Convention-- provided the group with advice on trapping, including: techniques, trap selection and setup, trap location, bait, and how not "educate" coyotes by using poor trapping practices. Following the main presentation, Todd gave a hands-on demonstration outside that included setup of an actual trap to a smaller group. The event, sponsored by AgSouth Farm Credit, featured a fish fry dinner as well as a firearm raffle for a Remington .308. Representatives from three other SC Branches (Midlands, Lowcountry, and Edisto River) also attended. To conclude the evening, Branch president Nicole Garriss announced that the Branch's "Venison for the Hungry" program would be expanded this year (up to a total of 3,000 pounds of venison donated to local charities) and that the Branch would be expanding its activities to include a number of fall and winter youth hunts. Finally, the ACE Basin Branch received a \$1,000 community grant from Wells Fargo and then in December hosted a fellowship gathering/ hunt for 30 QDMA Branch leaders from the S.C. State Chapter.

#### Mountain Maryland Branch - Whitetail Facts Class Held at Junior Hunt Field Day

Recently the Mountain Maryland Branch took part in the Maryland Department of Natural Resources' Junior Hunt Field Day at the Western Maryland 4H Center. This annual event gives youth the opportunity to learn about trapping, shooting, and White-tailed Deer. A.J. Fleming, president of the Branch, taught the workshop entitled "Whitetail Facts" which included information about aging white-tailed deer, antler casting, velvet shedding, and Quality Deer Management. Carl Lee, vice president, also provided answers to whitetail questions presented by the youth hunters.

#### Downeast Maine Branch

The Downeast Maine Branch is beginning the second year of a winter mortality and deer herd health study where QDMA members collect fetus' and a jaw bone from any vehicle collision/ deer accidents that occur in a three county area. The first year was a great learning experience and has helped build bridges between the Branch and Maine Department of Inland Fisheries and Wildlife (MDIFW). The study would not be possible without QDMA members.

## CONTACT A QDMA BRANCH NEAR YOU

| Branch Name                       | Town           | State       | Branch Contact  | Phone        | E-mail                             |
|-----------------------------------|----------------|-------------|-----------------|--------------|------------------------------------|
| Alabama State Chapter             | Trinity        | Alabama     | Philip Hester   | 256-318-2971 | Hesterphilipsusa@bellsouth.net     |
| Central Alabama Branch            | Trinity        | Alabama     | Philip Hester   | 256-318-2971 | Hesterphilipsusa@bellsouth.net     |
| Lake Martin Branch                | Goodwater      | Alabama     | Jerry Brown     | 256-839-5154 | brown3331@bellsouth.net            |
| Connecticut River Valley          | North Haven    | Connecticut | Ronnie Reaves   | 203-239-1106 | crvb-qdma@sbcglobal.net            |
| Delaware Branch                   | Millsboro      | Delaware    | Chip West       | 302-238-0137 | deqdma@gmail.com                   |
| Delaware State Chapter            | Millsboro      | Delaware    | Chip West       | 302-238-0137 | deqdma@gmail.com                   |
| Big Bend Branch                   | Tallahassee    | Florida     | Allen Mortham   | 850-671-1998 | amortham@aol.com                   |
| Devil's Garden Branch             | Clewiston      | Florida     | Marc Proudfoot  | 954-445-9199 | marc.proudfoot@gmail.com           |
| Florida Gulf Coast Branch         | Bonifay        | Florida     | Erick French    | 850-326-3712 |                                    |
| Georgia State Chapter             | Fortson        | Georgia     | Amanda Woods    | 706-568-8412 | awood@woodlandsandwildlife.com     |
| Lanier Branch                     | Gainesville    | Georgia     | Ryan Thompson   | 770-503-0826 | thompson_ryan@bellsouth.net        |
| Middle-Georgia Branch             | Forsyth        | Georgia     | Jason Butler    | 478-992-9803 | jbutler@fickling.com               |
| Illinois State Chapter            | Joy            | Illinois    | Chase Burns     | 309-368-0370 | wci_qdma@frontier.com              |
| Southern Illinois Branch          | Murphysboro    | Illinois    | Matt Duffy      | 618-806-1405 | matthew.duffy@countryfinancial.com |
| West-Central Branch               | Joy            | Illinois    | Chase Burns     | 309-368-0370 | wci_qdma@frontier.com              |
| Indiana Branch                    | Hagerstown     | Indiana     | Jeff Stout      | 765-489-5606 | jeff.w.stout@cummins.com           |
| Laughery Valley Branch            | Batesville     | Indiana     | Thomas Grills   | 812-689-5156 | tom.grills@yahoo.com               |
| River City Branch                 | Evansville     | Indiana     | Brandon O'Bryan | 812-303-3202 | brandon@obryanbarrel.com           |
| White River QDMA Branch           | Norman         | Indiana     | Mitch Ray       | 812-966-2013 | iamgreatwhite@gmail.com            |
| Mid Iowa Branch                   | Granger        | Iowa        | Terry Sedivec   | 515-999-2184 | tsedivec@netzero.com               |
| Tri-State Area Branch             | Dubuque        | Iowa        | Dennis Althaus  | 563-552-2628 | dalthaus@yousq.net                 |
| Bluestem Branch                   | EL Dorado      | Kansas      | Timothy Donges  | 316-641-0011 | deerhunter_stud@hotmail.com        |
| North Central Kansas              | Scandia        | Kansas      | Pete Gile       | 785-452-0592 | pete_gile@yahoo.com                |
| Blue Grass Branch                 | Cynthiana      | Kentucky    | Robin Gassett   | 770-894-9600 | robingassett@alltel.net            |
| Central Kentucky Branch           | Lawrenceburg   | Kentucky    | Anita Hardin    | 502-839-1133 | ak.hardin@hotmail.com              |
| Derby City Branch                 | Louisville     | Kentucky    | Pete Blandford  | 502-231-2625 | blandford_peter@bellsouth.net      |
| Kentucky Bourbon Trail Branch     | Elizabethtown  | Kentucky    | Glen Carlisle   | 270-268-3697 | 4glencarlisle@comcast.net          |
| Central Louisiana Branch          | Alexandria     | Louisiana   | Bob Stevens     | 318-445-9224 | stevensb@rapides.k12.la.us         |
| Louisiana State Chapter           | Alexandria     | Louisiana   | Bob Stevens     | 318-487-1158 | stevensb@rapides.k12.la.us         |
| Northeast Louisiana Branch        | West Monroe    | Louisiana   | Bobby Aulds     | 318-355-8974 | bobby@greensportusa.com            |
| Red River Branch                  | Benton         | Louisiana   | Sean McKay      | 318-965-4815 | sean@crawfordforestry.com          |
| South Louisiana Branch            | St. Amant      | Louisiana   | Sandy Comeaux   | 225-769-6620 | escomeaux@aol.com                  |
| Webster Parish Branch             | Minden         | Louisiana   | Mitzi Thomas    | 318-377-3065 |                                    |
| Casco Bay Branch                  | South Portland | Maine       | Matthew Snyder  | 207-595-2365 | prelude8626@aol.com                |
| Downeast Branch                   | East Machias   | Maine       | Mike Look       | 207-255-4167 | michaellook501@hotmail.com         |
| First Maine Branch                | Palmyra        | Maine       | Jeff Nicholas   | 207-938-2742 | Pres1stmaineqdma@aol.com           |
| Maine State Chapter               | Palmyra        | Maine       | Jeff Nicholas   | 207-938-2742 | Pres1stmaineqdma@aol.com           |
| Bachman Valley Branch             | Westminster    | Maryland    | Barry Harden    | 410-346-0990 | bharden@marylandqdma.com           |
| Chester River Branch              | Centreville    | Maryland    | Temple Rhodes   | 410-310-8165 | chestnutm@verizon.net              |
| Forstburg State University Branch | Walkersville   | Maryland    | Chris Keiser    | 301-845-6177 | cakeiser0@frostburg.edu            |
| Maryland State Chapter            | Westminster    | Maryland    | E.W. Grimes     | 410-984-3356 | ewgrimes@marylandqdma.com          |
| Mountain Maryland Branch          | Swanton        | Maryland    | A.J. Fleming    | 301-387-5465 | afleming13@verizon.net             |
| W. Chesapeake Watershed Branch    | Barnesville    | Maryland    | Joe Brown       | 240-388-0602 | jbrown@patriotlwm.com              |
| Barry County Branch               | Hasting        | Michigan    | Mike Flohr      | 269-838-6268 | mikeflohr@hotmail.com              |
| Bluewater Branch                  | Yale           | Michigan    | Marty Worton    | 810-650-7924 | martyworton@gmail.com              |
| Capital Area Branch               | Mason          | Michigan    | Dick Seehase    | 517-993-8475 | rjs@cqtpp.com                      |
| Central Michigan QDMA             | Elwell         | Michigan    | Jarred Waldron  | 517-403-9328 | headhunter01jarred@yahoo.com       |
| Clinton/Ionia County Branch       | St. Johns      | Michigan    | Chad Thelen     | 517-819-6344 | cthelen8@hotmail.com               |
| Eaton County Branch               | Pottersville   | Michigan    | Aaron Lundy     | 517-224-4013 | alundy@airliftcompany.com          |
| Mackinac Branch                   | Grand Ledge    | Michigan    | Billy Keiper    | 906-322-5425 | keiperw@mail.gvsu.edu              |
| Michigan State Chapter            | Webberville    | Michigan    | Mike McGuire    | 517-223-1442 | mmcguire@cardlog.com               |
| Mid-Michigan Branch               | Harrison       | Michigan    | Frank Myers     | 989-386-9194 |                                    |
| Montcalm County Branch            | Fenwick        | Michigan    | Michael Myers   | 989-613-0670 | michaelmyers1990@yahoo.com         |
| Northeast Michigan Branch         | Herron         | Michigan    | Irvin Timm      | 989-727-2594 | vltimm@peoplepc.com                |
| Northwest Michigan                | Lake Ann       | Michigan    | Ryan Ratajczak  | 231-275-3349 | ryan@northwoodstrailcameras.com    |
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