PUBLIC OPINION ON AND ATTITUDES TOWARD HUNTING

Pathways 2014 Conference
Integrating Human Dimensions Into Fisheries and Wildlife Management

Presented by Mark Damian Duda, Responsive Management
To all you hunters who kill animals for food, shame on you; you ought to go to the store and buy the meat that was made there, where no animals were harmed.

I am calling in regard to the Speakout. I am an avid
Research Update

Recent Studies at Responsive Management

Responsive Management has recently completed more than 30 studies on public opinion on and attitudes toward natural resource, fish and wildlife, and outdoor recreation issues. Currently, we are working on numerous additional studies, including a study on Utah Off-Highway Vehicle (OHV) use, knowledge of environmental impacts of use, and awareness of related marketing campaigns; a survey of Northeast U.S. residents' to determine attitudes toward and experiences with wildlife causing problems; and an assessment of hunting license marketing campaigns to calculate economic lift and determine the overall effectiveness of different messages and
Reach of Responsive Management

- 700 human dimensions projects
- Almost $50 million in research
- 50 states – 15 countries
- Every state fish and wildlife agency and most federal resource agencies; most DNRs and NGOs
- Initiated by WAFWA in 1985
- Data collection for the nation’s top universities:
  Auburn University, Colorado State University,
  Duke University, George Mason University,
  Michigan State University, Mississippi State University,
  North Carolina State University,
  Oregon State University, Penn State University,
  Rutgers University, Stanford University, Texas Tech,
  University of California-Davis,
  University of Florida, University of Montana,
  University of New Hampshire, University of Southern California, Virginia Tech, and West Virginia University
Hunting Participation
Certified Paid Hunting License Holders in the United States
(Source: Federal Assistance License Data)

Number of License Holders

License Year

Responsive Management
Hunter numbers up 9% between 2006 and 2011.
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Alabama</td>
<td>310</td>
<td>492</td>
<td>59%</td>
<td>Montana</td>
<td>145</td>
<td>104</td>
<td>-28%</td>
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<tr>
<td>Alaska</td>
<td>53</td>
<td>104</td>
<td>96%</td>
<td>Nebraska</td>
<td>102</td>
<td>110</td>
<td>8%</td>
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<tr>
<td>Arizona</td>
<td>126</td>
<td>225</td>
<td>79%</td>
<td>Nevada</td>
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<td>39</td>
<td>-28%</td>
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<tr>
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<td>301</td>
<td>316</td>
<td>5%</td>
<td>New Hampshire</td>
<td>51</td>
<td>42</td>
<td>-18%</td>
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<tr>
<td>California</td>
<td>274</td>
<td>377</td>
<td>38%</td>
<td>New Jersey</td>
<td>72</td>
<td>93</td>
<td>29%</td>
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<tr>
<td>Colorado</td>
<td>126</td>
<td>144</td>
<td>14%</td>
<td>New Mexico</td>
<td>66</td>
<td>64</td>
<td>-3%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>36</td>
<td>46</td>
<td>28%</td>
<td>New York</td>
<td>491</td>
<td>739</td>
<td>51%</td>
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<tr>
<td>Delaware</td>
<td>19</td>
<td>19</td>
<td>0%</td>
<td>North Carolina</td>
<td>277</td>
<td>259</td>
<td>-6%</td>
</tr>
<tr>
<td>Florida</td>
<td>214</td>
<td>215</td>
<td>0%</td>
<td>North Dakota</td>
<td>86</td>
<td>50</td>
<td>-42%</td>
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<tr>
<td>Georgia</td>
<td>344</td>
<td>293</td>
<td>-15%</td>
<td>Ohio</td>
<td>467</td>
<td>516</td>
<td>10%</td>
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<tr>
<td>Hawaii</td>
<td>18</td>
<td>23</td>
<td>28%</td>
<td>Oklahoma</td>
<td>224</td>
<td>219</td>
<td>-2%</td>
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<tr>
<td>Idaho</td>
<td>122</td>
<td>162</td>
<td>33%</td>
<td>Oregon</td>
<td>218</td>
<td>181</td>
<td>-17%</td>
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<tr>
<td>Illinois</td>
<td>258</td>
<td>459</td>
<td>78%</td>
<td>Pennsylvania</td>
<td>933</td>
<td>699</td>
<td>-25%</td>
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<tr>
<td>Indiana</td>
<td>237</td>
<td>377</td>
<td>50%</td>
<td>Rhode Island</td>
<td>12</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Iowa</td>
<td>208</td>
<td>200</td>
<td>-4%</td>
<td>South Carolina</td>
<td>159</td>
<td>180</td>
<td>13%</td>
</tr>
<tr>
<td>Kansas</td>
<td>183</td>
<td>170</td>
<td>-7%</td>
<td>South Dakota</td>
<td>89</td>
<td>127</td>
<td>43%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>241</td>
<td>316</td>
<td>31%</td>
<td>Tennessee</td>
<td>265</td>
<td>276</td>
<td>4%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>241</td>
<td>253</td>
<td>5%</td>
<td>Texas</td>
<td>979</td>
<td>1080</td>
<td>10%</td>
</tr>
<tr>
<td>Maine</td>
<td>146</td>
<td>141</td>
<td>-3%</td>
<td>Utah</td>
<td>144</td>
<td>158</td>
<td>10%</td>
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<tr>
<td>Maryland</td>
<td>133</td>
<td>69</td>
<td>-48%</td>
<td>Vermont</td>
<td>56</td>
<td>66</td>
<td>18%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>57</td>
<td>52</td>
<td>-9%</td>
<td>Virginia</td>
<td>353</td>
<td>326</td>
<td>-8%</td>
</tr>
<tr>
<td>Michigan</td>
<td>721</td>
<td>501</td>
<td>-31%</td>
<td>Washington</td>
<td>179</td>
<td>200</td>
<td>12%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>509</td>
<td>457</td>
<td>-10%</td>
<td>West Virginia</td>
<td>194</td>
<td>184</td>
<td>-5%</td>
</tr>
<tr>
<td>Mississippi</td>
<td>238</td>
<td>436</td>
<td>83%</td>
<td>Wisconsin</td>
<td>649</td>
<td>763</td>
<td>18%</td>
</tr>
<tr>
<td>Missouri</td>
<td>540</td>
<td>477</td>
<td>-12%</td>
<td>Wyoming</td>
<td>50</td>
<td>76</td>
<td>52%</td>
</tr>
</tbody>
</table>

Source: 2006, 2011 National Survey
Hunting Participation 2012-2014

* Some states gave conflicting answers; an "average" color between the answers is used in these cases.

Responsive Management
Anticipated Hunting Participation 2014-2016

Increase
Stay about the same
Decrease

Increase / Stay about the same
Stay about the same / Decrease

* Some states gave conflicting answers; an “average” color between the answers is used in these cases.
- Urbanization
- Aging Society
- Fewer Whites
- Less Access
- Less Opportunity
Active Hunters’ Dissatisfactions
Percent who indicated that the following things strongly took away from his/her enjoyment of hunting or strongly influenced his/her decline in participation. (Among active hunters.) (Part 1.)

- Not enough places to hunt: 26%
- Not enough access: 23%
- Work obligations: 21%
- Amount of free time: 17%
- Pollution or litter: 15%
- Poor behavior of hunters: 14%
- Family obligations: 11%
- Costs of licenses: 10%
- No one to go with: 9%
- Having to travel to hunt: 8%
- Not enough game: 8%
- Personal health: 8%
- Too many hunters in the field: 7%
Percent who indicated that the following things strongly took away from his/her enjoyment of hunting or strongly influenced his/her decline in participation. (Among active hunters.) (Part 2.)

- Cost of hunting equipment: 7%
- Mandatory hunter education: 6%
- Complex regulations: 5%
- Not enough law enforcement officers: 4%
- Fear of injury by another hunter: 4%
- Feeling of causing pain to animals: 4%
- Other people's negative opinions: 4%
- Not enough trophy game: 4%
- Bag limits/season lengths: 3%
- Harassment by anti-hunters: 3%
- Loss of interest: 2%
- Feeling that hunting endangers animal populations: 2%
Inactive / Ex-Hunters’ Dissatisfactions
Percent who indicated that the following things strongly influenced him/her to not hunt in recent years. (Among inactive hunters.)

- Amount of free time: 40%
- Family obligations: 35%
- Work obligations: 34%
- Loss of interest: 33%
- Not enough access: 17%
- Feeling of causing pain to animals: 16%
- Not enough places to hunt: 16%
- Personal health: 14%
- Poor behavior of hunters: 11%
- No one to go with: 10%
- Having to travel to hunt: 10%
- Too many hunters in the field: 9%
- Cost of hunting equipment: 9%
- Feeling that hunting endangers animal populations: 8%
- Fear of injury by another hunter: 7%
- Costs of licenses: 6%
- Not enough law enforcement officers: 6%
- Not enough game: 6%
- Mandatory hunter education: 5%
- Pollution or litter: 5%
- Complex regulations: 3%
- Not enough trophy game: 3%
- Bag limits/season lengths: 3%
- Other people’s negative opinions: 2%
- Harassment by anti-hunters: 1%
Public Opinion on Hunting
Historical Studies on Attitudes Toward Hunting

- Applegate 1977 (attitudes toward deer hunting in New Jersey)
- Rohlfing 1978 (hunter conduct and public attitudes)
- Kellert 1980 (attitudes toward wildlife, reasons for opposing hunting)
Approval or Disapproval of Hunting (Adults)
METHODOLOGY

✓ 1995 Responsive Management Study
  • Telephone survey
✓ 2003 Responsive Management Study
  • Telephone survey
✓ 2006 Responsive Management Study
  • Telephone survey
✓ 2011 Responsive Management Study
  • Telephone survey (landlines + wireless)
✓ 2013 Responsive Management Study
  • Telephone survey (landlines + wireless)

✓ Study sample sizes: n=800 – 2,085
✓ Study sampling errors: +/- 3.5% – 2.2%
Q122. In general, do you approve or disapprove of legal hunting?  
(Adult Americans Nationwide) (2013)

Strongly approve: 52%  
Moderately approve: 27%  
Neither approve nor disapprove: 8%  
Moderately disapprove: 5%  
Strongly disapprove: 7%  
Don't know: 1%  

Percent (n=1306)  

79% approve, 12% disapprove.
Trends in Approval or Disapproval of Hunting
Factors Related to Approval or Disapproval of Hunting
By Species
Percent of Americans who moderately or strongly approve of hunting various species.

- Deer: 78%
- Wild turkey: 75%
- Small game: 71%
- Waterfowl: 69%
- Elk: 60%
- Black bear: 47%
- Mountain lion: 42%
- Mourning dove: 40%
By Motivation
Percent who strongly or moderately approve of various motivations of hunting. (Adult Americans nationwide).

- For the meat: 85%
- To protect humans from harm: 85%
- For animal population control: 83%
- For wildlife management: 81%
- To protect property: 71%
- For the sport: 53%
- To supplement income: 44%
- For the challenge: 40%
- For a trophy: 28%
By Method
Percent of Americans who strongly oppose the following types of hunting and shooting.

- Hunting using high tech gear, such as remote trail cameras, hearing devices, or laser tripwires: 56%
- Hunting in a high-fence preserve: 52%
- Shooting at targets that simulate human outlines: 47%
- Hunting over bait: 43%
- Hunting using special scents that attract game: 36%
- High-fence preserves for handicapped hunters with limited mobility: 28%
- Hunting / target or sport shooting on Sundays: 23%
- Hunting with dogs: 18%
WORDS MATTER
Survey Question Wording

“Do you support or oppose hunting?”

Source: AfricanGeographic.com

“Do you support or oppose legal, regulated hunting?”
WORDS MATTER
Q27. In general, do you support or oppose lethal methods to manage deer populations in Pennsylvania?

- **Strongly support**: 38%
- **Moderately support**: 25%
- **Neither support nor oppose**: 7%
- **Moderately oppose**: 9%
- **Strongly oppose**: 20%
- **Don't know**: 2%

Total respondents: 9212

63% of respondents support lethal methods to manage deer populations.
Q30. How about legal, regulated hunting? (Do you support or oppose this method of controlling deer populations in Pennsylvania?)

- Strongly support: 66
- Moderately support: 19
- Neither support nor oppose: 2
- Moderately oppose: 4
- Strongly oppose: 8
- Don't know: 1

Percent (n=9212): 85%
Overall Approval of Legal Hunting / Regulated Hunting:

- Strongly approve: 39.1%
- Moderately approve / approve: 21.4%
- Neither support nor oppose / neutral: 18.6%
- Moderately disapprove / disapprove: 8.4%
- Strongly disapprove: 12.5%

Responsive Management 2013: 52.0%
Cornell National Social Survey 2013: 27.0%
Approval or Disapproval of Hunting (Youth)
In general, do you approve or disapprove of hunting when it is legal to do so?

- Strongly approve: 49% (1995), 32% (2012)
- Neither approve nor disapprove: 5% (1995), 4% (2012)
- Strongly disapprove: 19% (1995), 9% (2012)
- Don't know: 3% (1995), 4% (2012)
Attitudes Toward Hunters
Public opinion on hunting is different from public opinion on hunters.
Q62. Do you agree or disagree that a lot of hunters violate hunting laws?

- **Strongly agree**
  - Active hunters: 23
  - Non-hunters: 38

- **Moderately agree**
  - Active hunters: 26
  - Non-hunters: 26

- **Neither agree nor disagree**
  - Active hunters: 5
  - Non-hunters: 13

- **Moderately disagree**
  - Active hunters: 26
  - Non-hunters: 15

- **Strongly disagree**
  - Active hunters: 21
  - Non-hunters: 8
Q15. In general, how many hunters drink alcohol while hunting? (Adult Americans Nationwide.)

- A lot of hunters: 25%
- A moderate amount: 25%
- A few hunters: 32%
- No hunters: 3%
- Don’t know: 16%
Variables Related to Attitudes Toward Hunting
Social Networks

- Knowing a hunter
- Parents and family members who approve of hunting
- Family or friends who hunt

Frequency of game meat consumption (Heberlein)
### APPROVAL OF HUNTING AMONG VARIOUS SUBGROUPS WITHIN THE ADULT U.S. POPULATION

#### POSITIVELY CORRELATED CHARACTERISTICS

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>% in Subgroup Approving of Hunting</th>
<th>Correlation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lives in a rural area not on a farm or ranch</td>
<td>91</td>
<td>***</td>
</tr>
<tr>
<td>Is 45–64 years old</td>
<td>86</td>
<td>***</td>
</tr>
<tr>
<td>Is male</td>
<td>84</td>
<td>***</td>
</tr>
<tr>
<td>Considers self white or Caucasian</td>
<td>83</td>
<td>***</td>
</tr>
<tr>
<td>Household income $60,000–$79,999</td>
<td>87</td>
<td>*</td>
</tr>
<tr>
<td>Respondent from South Atlantic Division (DE, FL, GA, MD, NC, SC, VA, WV)</td>
<td>84</td>
<td>*</td>
</tr>
</tbody>
</table>

#### NEGATIVELY CORRELATED CHARACTERISTICS

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>% in Subgroup Approving of Hunting</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is 18–24 years old</td>
<td>55</td>
<td>***</td>
</tr>
<tr>
<td>Is female</td>
<td>72</td>
<td>***</td>
</tr>
<tr>
<td>Considers self Hispanic or Latino (includes Mexican, Central American, etc.)</td>
<td>40</td>
<td>***</td>
</tr>
<tr>
<td>Is a full-time student</td>
<td>25</td>
<td>***</td>
</tr>
<tr>
<td>Respondent from New England Division (CT, MA, ME, NH, RI, VT)</td>
<td>58</td>
<td>**</td>
</tr>
<tr>
<td>Lives in a large city or urban area</td>
<td>70</td>
<td>**</td>
</tr>
<tr>
<td>Considers self Black or African-American</td>
<td>67</td>
<td>*</td>
</tr>
<tr>
<td>Is 25–44 years old</td>
<td>73</td>
<td>*</td>
</tr>
<tr>
<td>Respondent from Pacific Division (AK, CA, HI, OR, WA)</td>
<td>70</td>
<td>*</td>
</tr>
</tbody>
</table>


Note: *** indicates $p \leq 0.001$ (a relationship that is so strong that it would happen by chance only 1 out of 1,000 times); ** indicates $p \leq 0.01$ (a relationship that is so strong that it would happen by chance only 1 out of 100 times); and * indicates $p \leq 0.05$ (a relationship that is so strong that it would happen by chance only 5 out of 100 times). Note that the divisions of the United States refer to the divisions used by the U.S. Fish and Wildlife Service in the *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* (U.S. Fish and Wildlife Service/U.S. Census Bureau, 2007).
North American Model of Wildlife Conservation

- Public Trust
- Democratic Rule of Law
- Opportunity for All
- Noncommercial Use
- Legitimate Use
- International Resources
- **Scientific Policy**
  - Fish and wildlife management and policy is directed by *science* and *trained professionals*.
KEY CONSIDERATIONS

- Create a connection to hunting (attitudes change as people gain direct experience—Heberlein)
  - Knowing a hunter
  - Eating wild meat
  - Locavore
  - Emphasize social networks and mentoring
- Separate out poaching from hunting.
- Use the term “legal hunting” or “regulated hunting.”
- Engage animal welfare.
- Emphasize the role of hunting in wildlife management and habitat conservation.
- Ecological benefits resonate better than human benefits.
- Emphasize that species do not become endangered or extinct from legal, regulated hunting.
- Consider that support varies based on species, motivation, and method.
- Emphasize that most hunters eat the game they kill.
- Utilize agencies, wardens, and biologists as spokespersons (preferably in uniforms).
- Connect hunting to habitat and water resource issues, wherever possible.
- Develop programs to address hunter behavior (hunters v. hunting).
- Develop messages based on research.
- Test and evaluate programs.