Big Game Hunter Surveys

Geoff Kerr, Lincoln University
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Individual deer hunter benefits per trip relative to the median ($161.28), December 2009 NZ dollars

Non-recreational harvests

Significance of Recreation?

For hunters, for conservation ….

<table>
<thead>
<tr>
<th></th>
<th>1988 (Nugent)</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of big game hunters</td>
<td>50,000</td>
<td>?</td>
</tr>
<tr>
<td>Recreational deer harvest</td>
<td>42,600</td>
<td>?</td>
</tr>
<tr>
<td>Commercial deer harvest</td>
<td>30,400</td>
<td>7,000◆</td>
</tr>
<tr>
<td>Total deer harvest</td>
<td>73,000</td>
<td>?</td>
</tr>
<tr>
<td>Recreational share</td>
<td>58%</td>
<td>?</td>
</tr>
<tr>
<td>Recreational big game harvest</td>
<td>156,600</td>
<td>?</td>
</tr>
</tbody>
</table>

◆ G. Ottmann, pers. comm.
Hunters

• How many?
• How much effort?
• Where?
• When?
• Harvest?
• Behaviours?
• What do they want?
  – Heterogenous
Research programme

• Three internet surveys

  1. Demographics, motivations, recruitment to activity survey
     • May 2011 – November 2011

  2. Monthly activity, motivations, outcomes, satisfaction, spending, harvest
     • June 2011 – August 2012

  3. Hunter preferences
     • Late 2012

• Convenience sample unavoidable
  • NZDA survey soon
Key findings to date

**Number of big game hunters:** 22,000 to 50,000  
(Based on proportion of sample in NZDA: depends on assumptions & estimation error)

<table>
<thead>
<tr>
<th></th>
<th>Monthly recall</th>
<th>Annual recall</th>
<th><strong>Nugent 1988</strong> (Annual recall)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of trips</strong></td>
<td>17</td>
<td>15</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>Number of days hunted</strong></td>
<td>38</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td><strong>Reported number of deer killed per hunter</strong></td>
<td>7.0 ~ 8.0</td>
<td>3.9 ~ 5.1</td>
<td>2.3 ~ 3.2</td>
</tr>
<tr>
<td><strong>Reported number of big game killed per hunter (includes goats)</strong></td>
<td>n.a.</td>
<td>18 ~ 25</td>
<td>10 ~ 13</td>
</tr>
<tr>
<td><strong>% of hunters who did not kill any deer</strong></td>
<td>n.a.</td>
<td>30%</td>
<td>39%</td>
</tr>
<tr>
<td><strong>Reported number of deer killed (total)</strong></td>
<td>225,000 (30,000 hunters)</td>
<td>136,000 (30,000 hunters)</td>
<td>133,000 (adjusted = 55,000)</td>
</tr>
</tbody>
</table>
Age distributions: Males 15 years plus

Age (years)

- 15-19
- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70+

NZ
Hunters
Hunters are ageing

Average Annual Spend = $3714 ± $250

- Firearms & ammo: $912
- Transport: $697
- Optics: $566
- Other: $435
- Clothing: $317
- Food: $279
- Camping equipment: $231
- Dogs: $191
- Magazines, books, videos: $87
Average days hunted per respondent
<table>
<thead>
<tr>
<th>Hunt Attributes</th>
<th>Target Reds 2670 trips</th>
<th>Target Tahr 290 trips</th>
<th>Target Pigs 1514 trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SE) median</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days/hunt</td>
<td>2.19 (2)</td>
<td>3.16 (2)</td>
<td>1.90 (1)</td>
</tr>
<tr>
<td>Hunters/trip</td>
<td>2.07 (2)</td>
<td>2.61 (2)</td>
<td>2.22 (2)</td>
</tr>
<tr>
<td>Km (1 way)</td>
<td>138 (80)</td>
<td>274 (200)</td>
<td>112 (70)</td>
</tr>
<tr>
<td>Hours (1 way)</td>
<td>3.30 (1.5)</td>
<td>5.70 (3)</td>
<td>2.86 (1.33)</td>
</tr>
<tr>
<td>Personal trip cost ($)</td>
<td>$119 ($50)</td>
<td>$273 ($100)</td>
<td>$92 ($50)</td>
</tr>
<tr>
<td>Made a kill</td>
<td>40%</td>
<td>56%</td>
<td>46%</td>
</tr>
<tr>
<td>Kills/trip</td>
<td>Red .42 Pigs .15 Fallow .05</td>
<td>Tahr 1.18 Cham .10 Red .15 Fallow .07</td>
<td>Pigs .52 Red .25 Fallow .07</td>
</tr>
<tr>
<td>Land tenure</td>
<td>Private 23% Public 60% Both 17%</td>
<td>Private 10% Public 71% Both 19%</td>
<td>Private 39% Public 39% Both 23%</td>
</tr>
</tbody>
</table>
Trip Satisfaction

• Seeing and killing game both play very small, but significant, roles in satisfaction
• Seeing game is 5.3 times more important to satisfaction than each animal killed
• Consistent with stated motivations
Primary Hunt Motivations

- Trophy
- Meat
- Enjoy the outdoors

Target Tahr only
Target Red Deer only

Primary Hunt Motivations