Table 1. Summary of fisher den trees within SNAMP Fisher Study Area. Current April 27, 2012. Data are preliminary/subject to revision.

<table>
<thead>
<tr>
<th>Year</th>
<th>Natal dens</th>
<th>Maternal dens</th>
<th>Black oak</th>
<th>Incense cedar</th>
<th>White fir</th>
<th>Sugar pine</th>
<th>Ponderosa pine</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>9</td>
<td>20</td>
<td>6</td>
<td>14</td>
<td>7</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>9</td>
<td>18</td>
<td>5</td>
<td>13</td>
<td>9</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2012 (in progress)</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>34</td>
<td>50</td>
<td>21</td>
<td>40</td>
<td>30</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2: Basic information on the types of trees, and sizes of trees and snags known used by fishers within the SNAMP Fisher Study Area. Current as of April 27, 2012; Data are preliminary/subject to revision.

<table>
<thead>
<tr>
<th>Tree species</th>
<th>Number live</th>
<th>Number snags</th>
<th>Mean Dbh live (cm)</th>
<th>Mean DBH snag (cm)</th>
<th>Mean total ht live (m)</th>
<th>Mean total ht snag (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black oak</td>
<td>18</td>
<td>3</td>
<td>80.5</td>
<td>79</td>
<td>21.1</td>
<td>8.8</td>
</tr>
<tr>
<td>Incense cedar</td>
<td>23</td>
<td>17</td>
<td>123.4</td>
<td>101.4</td>
<td>33.2</td>
<td>18.3</td>
</tr>
<tr>
<td>White fir</td>
<td>13</td>
<td>17</td>
<td>110</td>
<td>104.3</td>
<td>34.3</td>
<td>30.9</td>
</tr>
<tr>
<td>Sugar pine</td>
<td>3</td>
<td>2</td>
<td>127.2</td>
<td>96</td>
<td>39.4</td>
<td>34.8</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>2</td>
<td>2</td>
<td>91.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data on mean tree height are 61 trees where detailed habitat measurements have been gathered.

Table 3. Habitat attributes around fisher den trees within SNAMP Fisher Study Area. Data are from 18 m fixed radius circular plots (? 1 ha) centered on den trees (completed for 61 trees so far). Elevation reflects all unique den trees (n=81), meaning trees that were used across several years were included only once.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy cover</td>
<td>72%</td>
<td>50 - 93%</td>
</tr>
<tr>
<td>Shrub cover</td>
<td>18.8%</td>
<td>0 - 82.5%</td>
</tr>
<tr>
<td>Herbaceous cover</td>
<td>5.4%</td>
<td>0 - 52.5%</td>
</tr>
<tr>
<td>Prevailing slope</td>
<td>34.1%</td>
<td>10 - 60.0%</td>
</tr>
<tr>
<td>Elevation (ft)</td>
<td>5321</td>
<td>4348 - 6609</td>
</tr>
</tbody>
</table>

Table 4. Aspect and orientation for 61 known den trees.

<table>
<thead>
<tr>
<th>Aspect/Orientation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect 1, 31-60</td>
<td>7</td>
</tr>
<tr>
<td>Aspect 1-30</td>
<td>4</td>
</tr>
<tr>
<td>Aspect 2, 31-60</td>
<td>4</td>
</tr>
<tr>
<td>Aspect 3, 61-90</td>
<td>6</td>
</tr>
<tr>
<td>Aspect 4, 91-120</td>
<td>3</td>
</tr>
<tr>
<td>Aspect 5, 121-150</td>
<td>6</td>
</tr>
<tr>
<td>Aspect 6, 151-180</td>
<td>3</td>
</tr>
<tr>
<td>Aspect 7, 181-210</td>
<td>2</td>
</tr>
<tr>
<td>Aspect 8, 211-240</td>
<td>5</td>
</tr>
<tr>
<td>Aspect 9, 241-270</td>
<td>4</td>
</tr>
<tr>
<td>Aspect 10, 271-300</td>
<td>7</td>
</tr>
<tr>
<td>Aspect 11, 301-330</td>
<td>6</td>
</tr>
</tbody>
</table>

- Live Den Trees (n = 51)
- Den Tree Snags (n = 31)
- All Den Trees - by Species
## Case Study: SNAMP Female Fisher “F01”

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial capture</td>
<td>Dec 23, 2007</td>
<td>2nd animal captured</td>
</tr>
<tr>
<td>Confirmed in Natal Den tree</td>
<td>Apr 9, 2008</td>
<td>1st Fisher den tree identified in Bass Lake District, Sierra NF</td>
</tr>
<tr>
<td>Moves single kit to different tree</td>
<td>June 4, 2008</td>
<td>Verifies cameras can be used to obtain kit counts</td>
</tr>
<tr>
<td>Moves kits to 3 other den trees</td>
<td>Late Apr to early Jun, 2008</td>
<td>Only female Fisher tracked during 1st den season (2008)</td>
</tr>
<tr>
<td>Recaptured</td>
<td>Jun 17, 2008</td>
<td>Healthy, fitted with new collar</td>
</tr>
<tr>
<td>Confirmed in Natal Den tree</td>
<td>Apr 3, 2009</td>
<td>Shifts denning towards Nelder Grove area; uses 3 trees</td>
</tr>
<tr>
<td>Recaptured</td>
<td>Oct 20, 2010</td>
<td>Fitted with new collar; healthy</td>
</tr>
<tr>
<td>Confirmed in Natal Den tree</td>
<td>Mar 26, 2010</td>
<td>Natal den on Calvin Crest Property; used just two trees in 2010</td>
</tr>
<tr>
<td>Mortality signal</td>
<td>Feb 7, 2010</td>
<td>Carcass recovered; necropsy — died of infection after predator attack</td>
</tr>
</tbody>
</table>

## Case Study: SNAMP Male Fisher “M02”

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial capture</td>
<td>Dec 30, 2007</td>
<td>3rd animal captured</td>
</tr>
<tr>
<td>Recapture</td>
<td>Feb 27, 2008</td>
<td>See picture with Anne</td>
</tr>
<tr>
<td>Disappeared</td>
<td>May 31, 2008</td>
<td>Not heard for 2 months</td>
</tr>
<tr>
<td>Relocated</td>
<td>Aug 7, 2008</td>
<td>20 miles north in YNP</td>
</tr>
<tr>
<td>Recaptured</td>
<td>Feb 18, 2010</td>
<td>Fitted with new collar</td>
</tr>
<tr>
<td>Signal lost</td>
<td>Jan 15, 2012</td>
<td>Collar battery expired</td>
</tr>
<tr>
<td>Found dead</td>
<td>Apr 26, 2012</td>
<td>Roadkill in YNP</td>
</tr>
</tbody>
</table>

*1st evidence of long distance dispersal from Sierra NF north into Yosemite NP*
Fisher Den Trees

- Spring 2008 (n = 4)
- Spring 2009 (n = 28)
- Spring 2010 (n = 30)
- Spring 2011 (n = 18)
- Spring 2012 (n = 19)

NOTE: 41 total den trees within Key Watersheds