Abstract:
- capture and sedation techniques of North American porcupine (Erethizon dorsatum)
  - drugs described in other studies: lead to mortalities, injuries and extended holding/recovery times
- the intention of our research is to determine the effectiveness of this new method of capturing, sedating, handling and reviving porcupines
- this work is part of a larger study of porcupines in an urban riparian forest
- 20 animals captured from 2005 to 2007
- capture and handling techniques used:
  - baited Havahart® live trap
  - funnel cage holding (for injection of sedative)
  - antagonist atipamezole hydrochloride (Antisedan®) for sedation
- animals monitored until safe in a tree

Results:

<table>
<thead>
<tr>
<th>Age</th>
<th># Caught</th>
<th>Mean Dose per kg</th>
<th>Mean Sedation time</th>
<th>Mean Revival time</th>
<th>Mean Handling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 yrs</td>
<td>2</td>
<td>0.24 cc/kg</td>
<td>42 min</td>
<td>4 min</td>
<td>66 min</td>
</tr>
<tr>
<td>1 to 2 yrs</td>
<td>3</td>
<td>0.22 cc/kg</td>
<td>52 min</td>
<td>6 min</td>
<td>78 min</td>
</tr>
<tr>
<td>&gt; 2 yrs</td>
<td>15</td>
<td>0.30 cc/kg</td>
<td>50 min</td>
<td>10 min</td>
<td>90 min</td>
</tr>
</tbody>
</table>

Conclusions:
- Domitor® provides enough sedation for basic examinations and Antisedan® allows for quick recovery and return to habitat
- findings from our use of Domitor® and Antisedan®:
  - minimal recovery time (under five minutes)
  - no noted residual drug effects
  - no mortality
  - no negative side effects noted
  - trapping method humane, but does not guarantee a capture

Future Considerations:
- effects of drugs on pregnant porcupines
- increase sample size

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