### 2013 - JCR Evaluation Form

**Species:** Bison  
**Period:** 6/1/2013 - 5/31/2014  
**Herd:** BI101 - JACKSON  
**Hunt Areas:** 2, 888  
**Prepared By:** ALYSON COURTEMANCH

#### 2008 - 2012 Average | 2013 | 2014 Proposed
---|---|---
**Population:** | 896 | 825 | 775
**Harvest:** | 194 | 234 | 230
**Hunters:** | 256 | 328 | 320
**Hunter Success:** | 76% | 71% | 72%
**Active Licenses:** | 256 | 328 | 320
**Active License Percent:** | 76% | 71% | 72%
**Recreation Days:** | 1,811 | 2,363 | 2,200
**Days Per Animal:** | 9.3 | 10.1 | 9.6
**Males per 100 Females:** | 68 | 52 |  
**Juveniles per 100 Females:** | 46 | 48 |  

**Population Objective:** 500  
**Management Strategy:** Recreational  
**Percent population is above (+) or below (-) objective:** 65%  
**Number of years population has been + or - objective in recent trend:** 0  
**Model Date:** None

**Proposed harvest rates (percent of pre-season estimate for each sex/age group):**

<table>
<thead>
<tr>
<th>JCR Year</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females ≥ 1 year old:</td>
<td>na%</td>
</tr>
<tr>
<td>Males ≥ 1 year old:</td>
<td>na%</td>
</tr>
<tr>
<td>Juveniles (&lt; 1 year old):</td>
<td>na%</td>
</tr>
<tr>
<td>Total:</td>
<td>na%</td>
</tr>
</tbody>
</table>

**Proposed change in post-season population:** na%

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![Population Size - Postseason](chart.png)
Age Structure of Field Checked Males

Age Structure Data (Field and Laboratory) - Male

Age Structure Data (Field and Laboratory) - Female
## 2008 - 2013 Postseason Classification Summary

for Bison Herd BI101 - JACKSON

<table>
<thead>
<tr>
<th>Year</th>
<th>Post Pop</th>
<th>MALES</th>
<th>FEMALES</th>
<th>JUVENILES</th>
<th>Males to 100 Females</th>
<th>Young to 100 Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tot %</td>
<td>Conf Int</td>
<td>Total %</td>
<td>Tot Conf Int</td>
<td>Total %</td>
</tr>
<tr>
<td></td>
<td>Tot Cls</td>
<td>Cls Obj</td>
<td>Tot Cls</td>
<td>Cls Obj</td>
<td>Tot Cls</td>
<td>Cls Obj</td>
</tr>
<tr>
<td>2008</td>
<td>898</td>
<td>35%</td>
<td>369</td>
<td>42%</td>
<td>200</td>
<td>35%</td>
</tr>
<tr>
<td>2009</td>
<td>895</td>
<td>33%</td>
<td>421</td>
<td>48%</td>
<td>165</td>
<td>33%</td>
</tr>
<tr>
<td>2010</td>
<td>927</td>
<td>32%</td>
<td>423</td>
<td>46%</td>
<td>193</td>
<td>32%</td>
</tr>
<tr>
<td>2011</td>
<td>887</td>
<td>31%</td>
<td>386</td>
<td>46%</td>
<td>196</td>
<td>31%</td>
</tr>
<tr>
<td>2012</td>
<td>875</td>
<td>29%</td>
<td>429</td>
<td>50%</td>
<td>179</td>
<td>29%</td>
</tr>
<tr>
<td>2013</td>
<td>825</td>
<td>26%</td>
<td>398</td>
<td>50%</td>
<td>191</td>
<td>26%</td>
</tr>
</tbody>
</table>

### 2014 HUNTING SEASONS

**JACKSON BISON HERD (BI101)**

<table>
<thead>
<tr>
<th>Hunt Area</th>
<th>Type</th>
<th>Dates of Seasons</th>
<th>Quota</th>
<th>License</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Opens</td>
<td>Closes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Aug. 15</td>
<td>Jan. 18</td>
<td>90</td>
<td>Limited quota</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Aug. 15</td>
<td>Jan. 18</td>
<td>225</td>
<td>Limited quota</td>
</tr>
</tbody>
</table>
Summary of 2014 License Changes

<table>
<thead>
<tr>
<th>Hunt Area</th>
<th>Type</th>
<th>Quota change from 2013</th>
<th>Other changes from 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>-20</td>
<td>+ 6 days</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>-75</td>
<td>+ 6 days</td>
</tr>
</tbody>
</table>

**Management Evaluation**

**Current Postseason Population Management Objective:** 500

**Management Strategy:** Recreational

**2013 Postseason Population Estimate:** ~825

**2014 Proposed Postseason Population Estimate:** ~775

The population objective for the Jackson Bison herd is 500 bison. The management strategy is recreational and the objective and management strategy were last revised in 2008.

The current population estimate is approximately 825 bison. Annual harvest rates have recently begun to slowly reduce the population. The population objective will be reviewed in 2014.

**Herd Unit Issues**

Management of this herd is complicated because occupied habitat includes Grand Teton National Park (GTNP), the National Elk Refuge (NER) and the Bridger-Teton National Forest (BTNF). Bison remain distributed in GTNP during much of the summer and fall and are not available for hunting until they migrate to either BTNF or the NER. Over the past several years, bison have become sensitized to the presence of hunters on the NER and will vacate the open hunt area. Hunter numbers are limited on the NER in an attempt to provide hunters with a quality hunting experience while moving the population toward the post-hunt objective of 500 bison.

**Weather**

Following an extremely dry summer and fall in 2012, weather conditions in 2013 were considerably wetter. The area received significant pulses of spring and fall moisture, which improved forage conditions for bison and other ungulates. At the time of the mid-winter survey, winter precipitation was reported at 109% of normal. Please refer to the following web sites for specific weather station data. [http://www.ncdc.noaa.gov/temp-and-precip/time-series](http://www.ncdc.noaa.gov/temp-and-precip/time-series) and [http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html](http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html)

**Habitat**

No habitat data has been collected on bison summer and winter ranges. There are no established vegetation transects in this herd unit. Please refer to the 2013 Annual Report Strategic Habitat Plan Accomplishments for Jackson Region habitat improvement project summaries ([http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx](http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx)).
Field Data

During the mid winter trend survey in 2014 a total of 786 bison were classified in the McBride and Poverty Flats areas on the NER and an additional 25 bison were observed on native ranges in the Spread Creek and Snake River areas for a total of 811 bison counted. Personnel from GTNP and the Wyoming Game & Fish Department classified 131 adult males, 74 yearling males, 398 cows and 191 calves. Seventeen bison were unclassified. Total herd unit ratios were 52 bulls:100 cows and 48 calves:100 cows. The bull ratio has steadily declined from 82:100 in 2008, likely due to bull harvest. The population is managed to maintain a high bull:cow ratio. Trend data indicate that the bison population has stabilized and begun to slowly decline with current harvest levels.

Harvest Data

Hunter numbers are managed to maintain hunter presence throughout the fall, however, in recent years, fewer Type 4 hunters contacted to participate in the hunt actually purchase licenses. During the 2013 season, a total of 110 hunters on the Any Wild Bison Priority list (Type 1 license) and 300 hunters on the Female/Calf Wild Bison Priority list (Type 4 license) were contacted by the Department. Initial hunter notifications are higher than the estimated harvest because not all persons notified purchased licenses to hunt. In 2013, 93% (n=102) of the hunters contacted on the any wild bison priority list purchased a license compared to 85% (n=93) in 2012 and 85% in 2011. Seventy-four percent (n=221) of the hunters contacted on the female/calf wild bison priority list purchased a license in 2013 compared to 49% in 2012, 45 % in 2011, and 62% in 2010. There were 5 Governor’s tags sold for bison in 2013.

During the 2013 bison season 328 hunters harvested 104 bulls, 89 cows, and 41 calves. In 2012, 265 hunters harvested 98 bulls, 77 cows, and 25 calves. In 2011, hunters harvested 194 total bison and during 2010, hunters harvested 178 total bison. In 2012, hunters reported a 71% success rate. In 2013, 16 bulls were harvested using Type 4 cow/calf licenses. Most of these incidents were due to sex misidentification by the hunter.

The annual bison harvest must exceed 200 animals to move this population toward its mid-winter objective of 500 bison. Changes in 2013 to increase hunter harvest included improving access along the Gros Ventre River through GTNP and implementing periodic hunting season closures on the NER in an effort to allow bison to move south and repopulate the NER without the presence of hunters. Intermittent closures during the 2013 hunting season did not have the desired effect on encouraging bison to move south and will not be implemented in 2014. Other changes made to improve access will remain in place for the 2014 bison season, which will again open on August 15. Additional changes this year are a reduction in Type 1 licenses in response to the declining bull:cow ratio and a reduction in Type 4 licenses to better match realistic demand. Also, the season will be extended by 6 days, until January 18, to increase opportunity for late season harvest.

Population

The 2014 mid winter trend count indicates that the population decreased by approximately 50 animals in 2013. The population peaked at 1,100 animals 2007, was stabilized by harvest from 2008-2010 and has started to trend downward in recent years. Consistently high calf:cow ratios
have made it difficult to reduce the population. Harvest levels need to continue to exceed 200 bison in order to move this population toward the post-season objective of 500 animals.

Management Summary

Hunting season quotas for female/calf wild bison will be 225 in 2014, a reduction in 75 from 2013. This change is to better match the actual demand for licenses. In 2013, only 221 Type 4 licenses were sold from the 300 quota. The quota for any wild bison will be 90 in 2014, a reduction of 20 licenses from 2013. This is in response to the declining bull:cow ratio and the fact that additional bulls are accidentally harvested on Type 4 licenses each year. Hunter access will be allowed along the Gros Ventre River from U.S. Highway 191 and along the Kelly Road in GTNP. Trend data and harvest levels indicate that a reduction of the population was achieved during years when harvest levels exceed 200 animals. Nearly all bison migrate to the NER and each year a high percentage of the population is counted and most cow/calf groups are fed on the NER. Since 2007, an average of 190 calves has been counted, indicating that harvest levels must exceed this count in order to move this population toward objective.