BLUE HILLS
(Region 7)

Description: Hunting District 704 contains approximately 5,411 mi² with 68% privately owned and 32% managed by various public land management agencies, and is located in the Prairie/Breaks ecological region. The Blue Hills bighorn sheep occupy a small portion (less than 3%) of elk and deer Hunting District 704 approximately 20 miles east of Miles City. The area is roughly bounded by the Yellowstone River to the north, the Powder River to the east, Johnson Creek and Second Creek to the south, and the Pine Hills to the west. Bighorn sheep are widely scattered throughout the area and do not seem to exhibit any large migratory patterns throughout the year. Information on seasonal ranges is not available due to lack of survey data.

The habitat occupied by bighorn sheep is the ponderosa pine/Rocky Mountain juniper breaks on the west side of the Powder River. Grassland and shrub grasslands are found along the creek bottoms and ridgetops and are interspersed throughout the area occupied by bighorn sheep. The major land use in the area is livestock grazing.

Public Access: There is very little public access to the Blue Hills bighorn sheep population at this time. The majority of the public land in this area is surrounded by private land that is not open to public access. Initially, public access for hunting the Blue Hills bighorn sheep population was allowed by private landowners in the area. A hunting season was initiated in 1965 and ran through 1988. Change of landowners and attitudes toward public access gradually reduced hunting opportunity to the point where the season was closed in 1989.

Bighorn Sheep Populations: In 1958, 12 bighorn sheep (N=7 from Wild Horse Island and N=5 from Gibson Lake/Sun River) were introduced into the Blue Hills. The population increased and was estimated at 65 to 70 animals in 1965. From 1966 to 1972, the population of bighorn sheep was estimated to have stabilized at around 70 to 80 animals. In 1975, the population fell to an estimated 41 bighorn sheep. In 1976, FWP supplemented the Blue Hills population with 25 bighorn sheep from the Sun River. No further population estimates were available until 2004. In 2004, a two-day aerial survey was conducted on the Blue Hills bighorn sheep population and 42 sheep were observed. No surveys have been conducted since 2004. Currently, the best estimate of the Blue Hills bighorn sheep population is between 50 to 70 animals based on landowner, FWP, and Bureau of Land Management (BLM) sightings.

FWP agreed to conduct the 2004 survey after a meeting with many of the landowners that control access to the Blue Hills bighorn sheep herd area. The survey was cost-shared with the BLM and was a good faith attempt to show the landowners in the area that FWP was willing to expend public funds and manpower to survey this population if the access issues could be resolved. As of the winter of 2007-08, there has been no change in the public access situation.

Recreation Provided: Hunting of the Blue Hills bighorn sheep herd was initiated in 1965 with the issuance of three ¾-curl licenses. This was reduced to two ¾-curl licenses from 1966 to 1972. From 1973 to 1979 the season was changed to a two either-sex license season. This was increased to three either-sex licenses from 1980 to 1988. The season was closed in 1989. Table 1 shows the history of season types and subsequent harvest of the Blue Hills bighorn sheep herd.

<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Season Type/ Number of Permits</th>
<th>Ram Harvest</th>
<th>Ewe Harvest</th>
<th>Total Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>3- ¾-curl</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>1966-1972</td>
<td>2- ¾-curl</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>1973-1975</td>
<td>2 ES</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>1976-1979</td>
<td>2 ES</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>1980-1988</td>
<td>3 ES</td>
<td>20</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>1989</td>
<td>closed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Season types and harvest of the Blue Hills bighorn sheep population, 1965-1989.
Other recreational activities such as wildlife viewing of this bighorn sheep population are very limited due to the lack of public access.

**Current Annual Harvest:** Hunting season has been closed since 1989.

**Accomplishments:** Originally, the population objective for the Blue Hills herd was 50 adult bighorn sheep. The population increased rapidly from 1958 to 1965 to 65 to 70 bighorn sheep, at which time a hunting season was instituted. The population has stabilized at around 50 to 70 bighorn sheep.

FWP continues to work with the BLM on identifying and protecting critical bighorn sheep habitat within the Blue Hills herd range. The BLM is in the process of completing their Miles City Resource Management Plan (RMP) covering the next 10 years. FWP has been working in cooperation with BLM to ensure there is sufficient protection of Blue Hills bighorn sheep habitat within this plan. FWP and BLM also cooperated on a helicopter survey of this population in 2004.

In 2001, FWP acquired a conservation easement on the 13,851-acre Fluss Ranch along the Powder River. This ranch is on the extreme north and east edge of the Blue Hills bighorn sheep range. Several bighorn sheep rams have been observed using this property.

Several meetings with landowners within the Blue Hills bighorn sheep range have occurred to try to address and resolve the current access issues. No favorable results have occurred to date but this dialog continues.

**Management Challenges:** The main issue in relation to the Blue Hills bighorn sheep herd is the lack of public access. The population is currently at a level where limited-entry hunting could be reinstated, yet the lack of public access for hunters precludes this at this time. Work continues with the affected landowners.

Maintaining separation of wild sheep and domestic sheep to avoid disease transmission between the two species is another issue. Currently there are several domestic sheep herds on the edges of the Blue Hills bighorn sheep range, and domestic sheep are used along the Powder River to help control leafy spurge. In 2003, a bighorn ram came into contact and actually bred several domestic ewes. This ram was removed, but it is uncertain if he had returned to the wild herd before removal. Sightings of bighorn sheep in 2003-04 decreased, indicating a reduction in the population. FWP needs to work with the BLM during the current RMP process to ensure any new BLM grazing allotments within the Blue Hills bighorn sheep range consider the effects of domestic sheep on the existing wild sheep population.

**Population Monitoring:** Currently, population estimates are only gathered through casual observations from landowners, hunters, and FWP and BLM personnel. A decision was made to not expend funds to survey this population until the access issues can be satisfactorily worked out.

**Summary of Public Comment**

Comments from the public generally indicate a concern over lack of access to these sheep for hunting and viewing. Concerns are also expressed regarding the long-term health and viability of this population due to the proximity of domestic sheep and the potential for disease transmission between the two species.

**Management Goal**

Manage for a healthy and productive bighorn sheep population with a diverse age structure. Cooperate with public land managers and private landowners in the management of bighorn habitats, and improve or gain the opportunity for bighorn sheep hunters to harvest sheep.

When and/or if the public access issue is rectified, FWP will begin to collect more reliable population information, and then will be able to more specifically address habitat and population management strategies.