# MEMORANDUM

**TO:** Graham Taylor, Regional Wildlife Manager

**FROM:** Adam Grove, Wildlife Biologist – White Sulphur Springs

**DATE:** April 12, 2012

**SUBJECT:** HD 446 elk survey results

Aerial elk surveys of HD 446 were flown on the morning of April 3, 2012 (south half of district from the Benton Gulch Road to the southern hunting district boundary) and on the afternoon of April 9, 2012 (north half of district from the Benton Gulch Road north) in the Department’s supercub with Greg Thielman piloting. Total survey time for the hunting district was approximately 6.0 hours with a total flight time of approximately 8.6 hrs (approximately 2.6 hours ferry time – the afternoon survey on April 9 was flown out of Great Falls, which reduced ferry time considerably).

Survey conditions for the April 3 survey (south 1/2) were sunny and clear with variable winds and temperatures that ranged from 30 to 45 degrees during the survey. Strong turbulent winds over much of the survey area made for very difficult flying conditions which prevented us from trying to classify groups of elk in several areas. Snow cover conditions were patchy with mostly bare ground present in many areas with early green-up conditions present. Elk were generally observed feeding or bedded in the open. Observability conditions for the survey were rated as fair. Survey conditions for the April 9 survey were partly cloudy to mostly cloudy near the end of the survey. Winds were light to moderate and didn’t affect or hamper aircraft maneuverability. Temperatures were in the 40s. Most of the survey area was bare of snow with early green-up conditions present with some areas of patchy snow cover. Elk were observed feeding or bedded in the open. Observability conditions for the survey were rated as good.

A total of 2,238 elk (154 BTBs, 53 Yrl bulls, 1,254 antlerless, 777 unclassified) were observed during the survey. The 2,238 elk observed this year was up approximately 7% from the 2,097 observed last year during the HD 446 survey. Elk numbers in the district continue to be well above objective, with this year’s total of 2,238 observed elk being approximately 236% of the HD’s observed objective of 950. A total of 154 brow-tined bulls (BTBs) were observed this year, the most observed in the hunting district since at least 1990. Even more would have been counted if we had been able to classify all the elk groups observed during the April 3 survey.

Breaking the survey results down by area, a total of 135 elk were observed in the area from U.S. Highway 12 to the Springdale Colony (WP#s 14 & 15). The desired number in this area is 175 (2005 Elk Plan). A total of 798 elk (WP#s 3-13) were observed in the Springdale Colony to Duck Creek Pass Road/Birch Creek area (desired – 175 elk). A total of 381 elk (WP#s 1-2, 26-29) were observed in the Duck Creek Pass Road to Wagner Gulch/Lingshire Road area (desired – 250 elk). A total of 395 elk (WP#s 16-25, 49-55) were observed in the Wagner Gulch Road to the northern hunting district boundary area (desired – 225 elk). Lastly, 529 elk (WP#s 30-48) were observed in the Beaver Creek/Dry Range area (desired – 125 elk).



**AERIAL TREND COUNT FORM**

OBSERVABILITY CONDITIONS: Fair PILOT:Greg Thielman FLIGHT TIME: ~ 2.6 hrs survey

Total: ~ 4.5 hrs (1.9 hrs ferry)

HUNTING DISTRICT: 446 (S2) AIRCRAFT: Supercub WEATHER: Sunny & clear, winds variable

Temp: 30-45

DATE: 4/3/12 OBSERVER: A. Grove

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **BTB** | **Yrl. Bulls** | **COWS** | **CALVES** | **ANTLER-** | **Unclass.** | **TOTAL** | **WP#** | **Photos** |
| 7 |  |  |  |  |  | 7 | 1 |  |
| 1 | 11 |  |  | 205 |  | 217 | 2 | Yes |
|  |  |  |  |  | 13 | 13 | 3 | Yes |
|  |  |  |  |  | 362 | 362 | 4 | Yes |
|  |  |  |  |  | 53 | 53 | 5 | Yes |
| 8 |  |  |  |  |  | 8 | 6 |  |
|  |  |  |  |  | 13 | 13 | 7 |  |
|  |  |  |  |  | 32 | 32 | 8 |  |
| 13 |  |  |  |  |  | 13 | 9 |  |
|  |  |  |  |  | 116 | 116 | 10 | Yes |
| 3 |  |  |  |  |  | 3 | 11/12 |  |
|  |  |  |  |  | 185 | 185 | 13 |  |
|  | 1 |  |  | 73 |  | 74 | 14 |  |
|  | 2 |  |  | 59 |  | 61 | 15 |  |
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**COMMENTS:** Strong turbulent winds in some areas really hampered survey and classification efforts. Mostly bare ground with early green-up conditions to patchy snow cover. Elk generally observed bedded or feeding in the open.

**AERIAL TREND COUNT FORM**

OBSERVABILITY CONDITIONS: Good PILOT: Greg Thielman FLIGHT TIME: Survey ~ 3.4 hrs

Total: 4.2 hrs (0.8 hrs ferry)

HUNTING DISTRICT: 446 (N2) AIRCRAFT: Supercub WEATHER: P.C to M.C., winds variable,

Temps in the mid 40s

DATE: 4/9/12 OBSERVER: A. Grove

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **BTB** | **Yrl. Bulls** | **COWS** | **CALVES** | **ANTLER-** | **Unclass.** | **TOTAL** | **WP#** | **Photos** |
|  |  |  |  | 17 |  | 17 | 16 | Yes |
|  | 4 |  |  | 39 |  | 43 | 17 |  |
| 1 |  |  |  |  |  | 1 | 18 |  |
|  |  |  |  | 38 |  | 38 | 19 | Yes |
|  |  |  |  | 1 |  | 1 | 20 |  |
|  |  |  |  | 10 |  | 10 | 21 |  |
|  | 5 |  |  | 73 |  | 78 | 22 |  |
| 4 |  |  |  |  |  | 4 | 23 |  |
|  | 7 |  |  | 140 |  | 147 | 24 |  |
| 23 |  |  |  |  |  | 23 | 25 |  |
| 3 |  |  |  |  |  | 3 | 26 |  |
|  | 1 |  |  | 13 |  | 14 | 27 |  |
|  |  |  |  | 11 |  | 11 | 28 |  |
|  | 1 |  |  | 128 |  | 129 | 29 |  |
|  |  |  |  | 2 |  | 2 | 30 |  |
|  |  |  |  | 13 |  | 13 | 31 |  |
|  | 4 |  |  | 221 |  | 225 | 32 |  |
|  | 3 |  |  | 66 |  | 69 | 33 |  |
|  |  |  |  | 47 |  | 47 | 34 |  |
|  |  |  |  | 45 |  | 45 | 35 |  |
|  | 12 |  |  | 7 |  | 19 | 36 |  |
| 3 |  |  |  |  |  | 3 | 37 |  |
|  |  |  |  |  |  |  |  |  |

**COMMENTS:** Survey area mostly bare with early greenup conditions with some areas of patchy snow. Elk observed feeding or bedded in the open. Fairly poor light near the end of the survey.

**AERIAL TREND COUNT FORM**

OBSERVABILITY CONDITIONS: PILOT: FLIGHT TIME:

HUNTING DISTRICT: 446 (N2) AIRCRAFT: WEATHER

DATE: 4/9/12 OBSERVER:

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **BTB** | **Yrl. Bulls** | **COWS** | **CALVES** | **ANTLER-** | **Unclass.** | **TOTAL** | **WP#** | **Photos** |
|  |  |  |  |  | 3 | 3 | 38 |  |
| 5 |  |  |  |  |  | 5 | 39 |  |
| 3 |  |  |  |  |  | 3 | 40 |  |
| 6 |  |  |  |  |  | 6 | 41 |  |
| 6 |  |  |  |  |  | 6 | 42 |  |
| 4 |  |  |  |  |  | 4 | 43 |  |
| 3 |  |  |  |  |  | 3 | 44 |  |
|  | 2 |  |  | 46 |  | 48 | 45 |  |
| 17 |  |  |  |  |  | 17 | 46 |  |
| 4 |  |  |  |  |  | 4 | 47 |  |
| 7 |  |  |  |  |  | 7 | 48 |  |
| 5 |  |  |  |  |  | 5 | 49 |  |
| 10 |  |  |  |  |  | 10 | 50/51 |  |
| 6 |  |  |  |  |  | 6 | 52 |  |
| 3 |  |  |  |  |  | 3 | 53 |  |
| 2 |  |  |  |  |  | 2 | 54 |  |
| 7 |  |  |  |  |  | 7 | 55 |  |
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|  |  |  |  |  |  |  |  |  |
| **154** | **53** |  |  | **1,254** | **777** | **2,238** |  | **TOTAL** |
|  |  |  |  |  |  |  |  |  |

