CRAZY MOUNTAINS EMU (Hunting Districts 315 and 580)



Description: This 1,708-square-mile EMU includes the Crazy Mountain Range and adjacent foothill and prairie habitats in south central Montana. The area is a mixture of private (78%) and public (22%) lands, including portions of both the Gallatin and Lewis and Clark national forests (16%), state school trust lands (DNRC – 5%), and USDI Bureau of Land Management (BLM – 0.2%). Land ownership patterns within the boundary of the national forests are characterized by checkerboard ownership. The EMU contains two roadless areas encompassing 149,467 acres of public and private lands that offer wilderness-type recreation. However, much of this roadless area is not elk habitat.

This EMU contains over 590,000 acres of occupied elk habitat (54% of EMU). National forest lands provide a large portion of spring, summer and fall elk habitat, but private lands in mountain foothill and sagebrush-grassland habitats provide over 80% of elk winter range during normal winters and virtually all of the available winter range during severe winters.

Public Access: Access by road to elk habitat is limited in most of HD 580 where the checkerboard pattern of land ownership complicates management of access. With few exceptions, public access to elk habitat on the north and east slopes of the Crazies is controlled entirely by private landowners. There are only 3 points in HD 580 where the public may legally access national forest lands – the Big Timber Canyon road in the southeast corner, the Cottonwood Creek/Forest Lake road on the north end and Sixteenmile Creek in the northwest corner of the hunting district. Public access to national forest lands is somewhat better in HD 315 with 5 legal access points including Smith Creek, the upper Shields River, Porcupine Creek, Cottonwood/Ibex, and Rock Creek.

Outfitters currently control access to much of the privately owned elk habitat. Free public access to these lands is generally limited to individuals with permits for antlerless elk and most of this access occurs after the general season. Limited public access causes frustration among hunters and concentrates hunting pressure in the vicinity of the few existing public access points. The Block Management Program has provided some new elk hunting opportunities in HD 315, but a recent private land purchase of several ranches totaling 44,000 acres effectively closed access to much of the southwest corner of the Crazy Mountains.

Elk hunters can expect backcountry type recreational opportunities in about 40% of HD 315 and about 20% of HD 580. Areas with a minimum level of motorized access account for about 40% of the area in HD 315 and 70% in HD 580 and areas with a moderate-high level of motorized access account for 20% of HD 315 and only 10% of HD 580. Motorized access on national forest lands is very limited with the most miles of open roads in the upper Shields River area of HD 315 and the Cottonwood Creek/Forest Lake area in HD 580. Open road densities on public lands have declined slightly over the last decade with the closure of a number of spur roads associated with the USFS land purchase in the upper Shields/north Crazy Mountain area in the early 1990s.

Elk Populations: Observed numbers of elk in this EMU have more than doubled in the last 10 years from just over 1,500 elk in 1992 to nearly 3,100 in 2002 (Figure 1). Counts on winter ranges in HD 315 have more than tripled from less than 400 elk in 1992 to over 1,500 in 2004. The elk population in HD 580 increased 45% from 1,144 elk in 1992 to 1,655 in 2002, declining slightly to 1,520 elk in 2004.

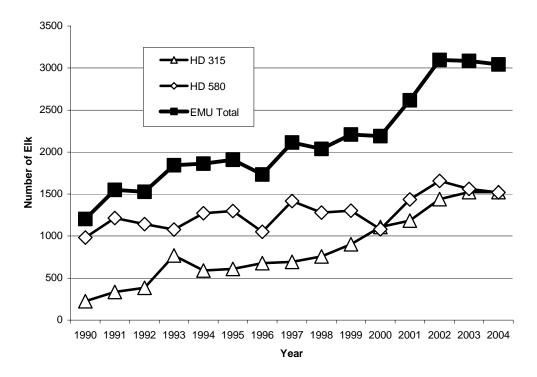


Figure 1. Number of elk observed during post-season aerial trend surveys in HDs 315 and 580, 1990-2004.

Recreation Provided: This EMU provided an average of 10,885 days of elk hunting recreation to 2,158 elk hunters each year during 1999-2001. This represented a 61% increase in hunter numbers and a 63% increase in elk hunter days of recreation from the average for 1990-1992. Lack of roaded access to much of the area limits wildlife viewing primarily to backcountry users. Wildlife viewing and photography by hikers, hunters, anglers and other recreationists comprise the majority of summer/fall use. There is little opportunity for the public to view elk during winter.

Annual Elk Harvest: The average annual elk harvest in this EMU during 1999-2001 was 534 elk. This represented a 48% increase from the average annual harvest of 360 elk during 1990-1992. The average bull harvest for 1999-2001 was 36% higher than during 1990-1992 (267 bulls harvested/year vs. 196 bulls harvested/year). Brow-tined bulls accounted for an average of 65% of the total bull harvest during 1999-2001 compared to 60% during 1990-1992. The harvest of antlerless elk averaged 266 animals/year during 1999-2001, a 62% increase from the average harvest of 164 antlerless elk/year during 1990-1992. During 1999-2001 non-resident hunters accounted for 19% of total elk harvested in the EMU and 36% of the total bull harvest. The proportion of bulls harvested by non-residents was slightly higher in HD 580 (39%) than in HD 315 (32%).

Accomplishments: Since 1992 we have implemented an extension of the elk permits to allow for the harvest of antlerless elk to 15 December, which has improved hunter access on private land and increased the harvest. We have also established 2 Block Management Areas in HD 315 that provide access to elk, one of which consistently provides a significant elk harvest. Beginning in fall, 2002, the first 8 days of the general season has been open to either-sex elk hunting without a special permit.

Management Challenges: Limited public access to national forest lands and lack of public access on or through private lands reduces the potential harvest, particularly of antlerless elk. Outfitters currently control access to much of the privately owned elk habitat resulting in limited public access. This limited access causes frustration among hunters and concentrates hunting pressure in the vicinity of the few existing public access points. Several ranches on the south and west side of the Crazy Mountains are owned by absentee landowners who do not depend on ranching for their income. Their perspective on public hunting and elk numbers results in creation of elk "refuges" which reduces the effectiveness of hunting seasons designed to reduce or stabilize elk populations. In these situations, liberalizing hunting regulations alone will not significantly increase the total elk harvest.

Population Monitoring: Aerial surveys are conducted in each elk herd unit at least once each year between 1 January and 15 April. Total numbers of elk and numbers of bulls observed are recorded.

SUMMARY OF PUBLIC COMMENT

Maintenance of the current elk habitat base is a major public concern. Since the majority of elk winter range is in private ownership it is important that landowners maintain their ranches in productive agricultural use. There is strong public interest in improving access to public land, particularly in HD 580. Many hunters support expanding the Block Management Program. Public comment regarding population levels is mixed, with some people supporting maintenance of current elk numbers, some wanting more elk, and others calling for fewer elk. Landowners generally prefer that elk be maintained at current levels or reduced. Many people express concern that outfitters and leasing operations are restricting elk hunters too much while catering to wealthy or non-resident hunters. There is frustration among hunters that a large portion of the bull harvest is taken by outfitters. There has been support for allowing more general season

either-sex hunting. Allowing either-sex permit holders to harvest antlerless elk after the general season has closed has met with considerable support. Some hunters and landowners would like to see the permits valid through 31December (currently valid through 15 December). Landowners that do allow public hunting have expressed frustration that they contend with too many hunters during the general season.

MANAGEMENT GOAL

Manage elk populations within the range of habitat availability and social tolerance while providing diverse hunting and non-hunting elk-related recreational opportunities.

HABITAT OBJECTIVE

Work cooperatively with public and private land managers to maintain quality elk habitat on presently occupied lands and maintain elk security so that elk harvest is distributed throughout the hunting season.

HABITAT MANAGEMENT STRATEGIES

High quality elk habitat has generally been maintained throughout the EMU as evidenced by the tremendous increase in elk numbers over the last decade.

The percent of the total bull harvest occurring during the first week of the general season may be an indicator of elk security (lower percentage equals higher security). During the 1999-2001 hunting seasons an average of 38% of the total bull harvest occurred during the first week of the season.

FWP will continue to:

- Monitor the percentage of bull elk harvested during the first week of the hunting season to assess any possible deterioration of elk security.
- Evaluate proposed logging, burning, grazing, mining, and housing and recreational developments with regard to their potential impacts on elk habitat and elk populations.
- Work with the Gallatin and Lewis and Clark national forests to maintain forest road densities at levels that balance concerns with elk security and hunter access.
- Encourage the USFS to consider the effects of previous timber sales and fires on elk habitat when planning future resource management projects.
- Help identify and facilitate purchase of conservation easements that will protect elk habitat and improve public access.

GAME DAMAGE STRATEGIES

Considering the significant increase in elk numbers wintering primarily on private land, there have been relatively few game damage complaints in this EMU.

Each game damage situation will be addressed based on its individual circumstances. FWP has a set of possible options that include stackyard protection, herding, early and late season special

hunts, directing hunters to the problem area during the general season, kill permits, use of A-7 and A-9/B-12 elk licenses (B-tags), and liberalizing the general antlerless harvest. In addition to these strategies for addressing game damage, increased access to private land for public hunting will be necessary to minimize game damage problems.

ACCESS STRATEGIES

FWP will:

- Identify important points of access to public lands and provide recommendations to the appropriate land management authority (Gallatin and/or Lewis and Clark National Forest) and the Access Montana Program.
- Encourage the USFS to obtain a trail easement to existing blocks of public land in the Swamp Creek area of the south Crazy Mountains and to pursue access into Sweet Grass Creek and South Fork of American Fork as outlined in the forest plan for the Gallatin National Forest. Purchase of a long-term access easement from a willing seller may be required to improve public access in these areas.
- Identify and pursue opportunities for new Block Management projects, which could improve access to public lands or provide additional opportunities for elk harvest on private lands.

POPULATION OBJECTIVES

- 1) Maintain numbers of elk observed during post-season aerial trend surveys within 20% of 1,975 elk in the EMU (1,580-2,370) with an objective of 1,000 elk in HD 315 and 975 elk in HD 580. Individual post-season herd count objectives are as follows:
 - A) Falls Creek (HD 315) 400 elk.
 - B) Cottonwood Creek to Porcupine Creek (HD 315) 150 elk.
 - C) Oil/Reese Hills (HD 315) 450 elk.
 - D) Otter Creek/Wheeler Creek (HD 580) 100 elk.
 - E) Big Timber Creek to West Fork Duck Creek (HD 580) 125 elk.
 - F) Sweet Grass Creek to Cottonwood Creek (HD 580) 500 elk.
 - G) Cottonwood Creek to Sixteenmile Creek (HD 580) 250 elk.
- 2) Maintain an observed post-season count of 225 bull elk in the EMU. Bull count objectives by Hunting District are as follows:
 - A) Hunting District 315 80 bulls.
 - B) Hunting District 580 145 bulls.
 - a) Portion of district north of Sweet Grass Creek 80 bulls.
 - b) Sweet Grass to West Fork Duck Creek 65 bulls.

POPULATION MANAGEMENT STRATEGIES

A portion of this EMU (the part of HD 580 between Sweet Grass Creek and West Fork of Duck Creek) has permit-only rifle hunting. The remainder of the EMU has a general elk season. Management strategies are presented separately for the 2 areas. Management strategies

(regulation types) will be implemented by hunting district or portion of a hunting district, not necessarily for the EMU as a whole.

REGULATION PACKAGES

Portion of the EMU with a general elk season (HD 315 and HD 580 north of Sweet Grass Creek):

Six-week either-sex archery regulation, EXCEPT, should Restrictive regulation for antlered elk be adopted, six-week BTB/antlerless archery regulation and see Liberal Regulation 2.) for Antlerless elk.

Antlerless:

<u>The Standard Regulation is:</u> 1.) limited either-sex permits. 2.) 1-2 weeks of general season either-sex regulations. (Limited A-9/B-12 antlerless licenses (B-tags) may also be recommended in combination with the above options).

The Standard regulation will be recommended if: the combined total post-season aerial trend counts for all herd units in a hunting district are within 20% of the hunting district objective.

<u>The Liberal Regulation is:</u> 1.) either-sex regulation for a portion of (or the entire) 5-week general season AND, in HD 580, antlerless permits valid past the end of the general season OR; in HD 315 2.) 5-week general season antlerless ONLY. (Limited A-9/B-12 antlerless licenses (B-tags) may also be recommended in combination with the above options).

Liberal Regulation 1.) (above) will be recommended if: the combined total post-season aerial trend counts for all of the herd units in a hunting district are more than 20% above the hunting district objective.

In HD 315, Liberal Regulation **2.)** (above) will be recommended if: after 2 consecutive years of application of Liberal Regulation 1.) (above), the total number of elk observed during post-season aerial surveys remains more than 20% above the HD elk objective.

<u>The Restrictive Regulation is:</u> limited either-sex or BTB/antlerless permits. Few or none of the permits will be valid for antlerless elk after the general season.

The Restrictive Regulation will be recommended if: The total post-season survey count for a hunting district is more than 20% below the objective for 2 consecutive years.

Antlered:

The Standard Regulation is: 5-week general season antlered bull regulation.

The Standard regulation will be recommended if: the post-season count of bulls is within 50% of the hunting district objective.

The Restrictive Regulation is: 5-week general season brow-tined bull regulation.

The Restrictive Regulation will be recommended if: the post-season count of bulls for a hunting district is less than 50% of the objective for 2 consecutive years.

Permit-only portion of the EMU (the portion of HD 580 between Sweet Grass Creek and West Fork of Duck Creek):

Six-week either-sex archery regulation, EXCEPT, if Restrictive Regulation is adopted, all hunting, INCLUDING archery is by limited permit.

Antlerless:

<u>The Standard Regulation is:</u> limited either-sex AND antlerless permits issued for the general 5-week season. Antlerless permits may be valid beyond the general season.

The Standard Regulation will be recommended if: the total post-season herd count is within 20% of the objective.

<u>The Liberal Regulation is:</u> an increased number of either-sex AND antlerless permits will be issued for the general 5-week season [Antlerless permits will be valid for a period beyond the general season (at least through 15 December)] OR, a portion (or all) of the general season may be open for general hunting of antlerless elk (no permit required).

The Liberal Regulation will be recommended if: the total post-season herd count is more than 20% above the objective.

<u>The Restrictive Regulation is:</u> limited antlerless permits valid for the archery and the 5-week general season.

The Restrictive Regulation will be recommended if: The total post-season herd count is more than 20% below the objective for 2 consecutive years.

Antlered:

The Standard Regulation is: limited either-sex permits.

The Standard Regulation will be recommended if: the total post-season bull count for the permit area is within 50% of the objective.

<u>The Restrictive Regulation is:</u> limited permits for brow-tined bulls valid during for the archery and general season.

The Restrictive Regulation will be recommended if: The total post-season bull count for the permit area is less than 50% of the objective for 2 consecutive years.

EAST BIG BELT EMU (Hunting District 446)



Description: This 609-square-mile-EMU is located west of White Sulphur Springs on the eastside of the Big Belt Mountains. About 391 square-miles of the EMU (64%) is seasonal or yearlong elk habitat. Approximately 28% of elk habitat in the EMU is on public land. The majority (83%) of the winter range in the EMU is on private land. In addition to winter use, many elk are on private land during other seasons of the year as well. Hunting district (HD) 446 along with HD 392 on the west side of the Big Belt Mountains comprised the Big Belt EMU in the 1992 Elk Plan (HD 892 in the 1992 Plan). Because of major differences in the amount of private land, public access for hunting, and options for elk population management in the two hunting districts, we separated the old Big Belt EMU into two separate EMU's. This separation was made with the realization that there is some overlap of elk from the 2 hunting districts. This overlap will be considered in developing regulation packages and habitat management strategies, particularly on public land.

The elk population in the East Big Belt EMU contains multiple herd units, best described by the location of the 6 main wintering concentrations of elk. These elk wintering concentration areas are as follows: the Hussy Creek-Badger Creek area just north of U.S. Highway 12 and east of the Broadwater-Meagher county line; the Birch Creek area; the Thomas Creek area; the Freighters Gulch-Rocky Hollow area, the Lingshire area, and the Dry Range area. Elk from these wintering concentration areas may mix during summer and fall throughout all the hunting districts in the Big Belt Mountains, and elk may move between the Big Belt Mountains and the west side of Little Belt Mountains as well.

Public Access: Access for public hunting is severely limited in the EMU due to the relative lack of public land and restricted access to private land. There are 4 public access roads to land administered by the Helena National Forest (HNF) from the east side of the Big Belt Mountains, although there is additional access from the west side. Over 90% of the private land in the EMU is closed to hunting by the general public for either all or a significant portion of the hunting season. Outfitting or fee hunting is prevalent. There are 2 small FWP Block Management Areas in the EMU.

Elk Populations: Observed numbers of elk have increased dramatically since the 1992 Elk Management Plan (Figure 1), due in large part to the relative lack of hunting pressure on private land compared to public land. The relative lack of hunting pressure has resulted in the creation of elk "refuge" areas on private land, which has reduced the opportunity to harvest elk. The average number of elk observed during post-season (late winter-early spring) aerial surveys in 2001-2003 was 2,280 (range 1,403-3,052), but the trend has been down for the last 3 years (Figure 1).

Recreation Provided: Hunting, camping, hiking and snowmobiling are the primary forms of recreation in the EMU. Road restrictions on much of the east-side of the HNF have created relatively large blocks of national forest land that have limited motorized access, resulting in walk-in type hunting situation in many areas. During 1999-2001, the EMU annually averaged 1,228 hunters (range 1,166-1,297) and 6,003 hunter days (range 5,566-6,493).

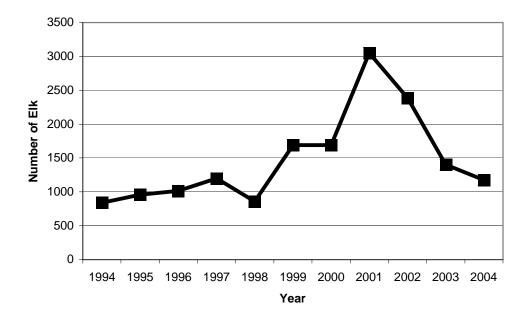


Figure 1. Number of elk counted during post-season aerial trend counts in the East Big Belt EMU, 1994-2004.

Annual Elk Harvest: The average annual harvest during 1999-2001 was 323 elk (124 antlered, 198 antlerless).

Accomplishments: Regulations for antlerless elk were liberalized in 1994 to try to help control the number of elk in the EMU. A general season either-sex youth hunt was implemented in the EMU in 2002.

Management Challenges: The majority of the elk in the hunting district are on private land that is outfitted during the general hunting season. Additionally, about 15-20% of the elk in the hunting district are in areas where hunting access is restricted to family or a few close friends. We estimate that less than 25% of the elk population in HD 446 is

available to the general public during most of the general hunting season. The prevalence of outfitting and areas of restricted access makes it difficult to manage elk numbers through hunter harvest. In 2001, nonresidents harvested more bulls in HD 446 than did residents (60 non-residents, 53 residents). A continuation of this trend may lead to the public perception that antlered animals are being sold to nonresidents, while the resident hunters are left to clean up the antlerless population for population control. As a result, resident hunters may become disgruntled.

There are currently no known wolves established in the Big Belt Mountains. However, wolves moving either north or south from areas that currently have wolves may eventually colonize the area.

Population Monitoring: Aerial trend surveys are accomplished on an annual basis between 1 January and 15 April using fixed wing aircraft. Because of budget limitations, generally only one survey is made annually. Conditions during the annual survey may vary considerably among years, thus results of single annual surveys are variable. Due to the difficulty of differentiating between cows and calves from fixed wing aircraft, often only the number of bulls (differentiated between yearlings and brow-tined bulls) and total number of antlerless animals are recorded. Additional funds will be necessary to accomplish additional fixed wing flights, or to allow for helicopter surveys.

SUMMARY OF PUBLIC COMMENT

Lack of public access to private lands that hold elk during the hunting season is a major concern among the hunting public. Hunters feel that the majority of the elk in the EMU are generally unavailable to them. The view of some resident hunters is that bull elk are being sold to nonresident hunters, and resident hunters are left to being the "cow cleanup crew". Some private landowners feel that they have too many elk and would like to see numbers reduced. The general opinion of the hunting public is that landowners who either outfit or allow limited to no access for hunting should not complain about having too many elk if they won't let people in to harvest elk. Some landowners view hunters as being as much or more of a problem than having too many elk.

MANAGEMENT GOAL

- 1) Provide a hunting regulation structure to allow for management of the elk population through hunter harvest, so that the number of elk observed post-season is within the desired objective range.
- 2) Work with private landowners to increase access for public hunting that will reduce observed elk numbers to the objective level.
- 3) Continue to cooperate with public and private land managers to provide optimum elk habitat, and manage for a diversity of elk hunting experiences.

HABITAT OBJECTIVES

- 1) Develop cooperative programs that encourage public and private land managers to maintain 391 square miles of occupied elk habitat.
- 2) Maintain or enhance elk security levels so that the elk harvest is distributed throughout the general hunting season, and more elk remain on national forest land during the general hunting season. Maintain or enhance elk security levels so that no more than 40% of the bull harvest occurs during the first week of the general season.
- 3) Maintain more elk on USFS land during the hunting season, so that elk do not seek out private land "refuge" areas; thereby, improving opportunity for hunters to harvest elk on national forest land in the EMU.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to the HNF in developing a comprehensive road management plan that will maintain or enhance elk security on national forest land during the hunting season, while still allowing adequate access for hunters.
- Provide technical assistance to land management agencies on projects that may enhance elk habitat and that encourages elk use of public lands.
- Encourage federal land management agencies to mitigate for any project that may have a negative impact on elk habitat or elk security levels.
- Provide technical assistance to the HNF on elk habitat and hunter opportunity issues related to any future land exchanges involving national forest lands in the Dry Range.

GAME DAMAGE STRATEGIES

Game damage complaints are limited in this EMU because the majority of private landowners lease hunting rights or restrict hunting access. As a result, most landowners do not qualify for game damage assistance under current FWP guidelines. The few damage complaints usually involve elk grazing rangeland during some season of the year, or grazing alfalfa fields in the early fall. There have been problems with elk getting into haystacks in the winter in the past, but these have generally been resolved by fencing the haystacks. Maintaining observed elk numbers within the objective range is the best way to deal with and to prevent game damage problems.

ACCESS STRATEGIES

FWP will-

- Assist the HNF in developing a comprehensive road management plan that enhances elk security on national forest land while still allowing adequate access for hunters to harvest elk on federal land.
- Work with private landowners to try and enhance opportunities for additional public hunting on private property or increased access through private property to public land.

- Provide information to the Helena National Forest regarding enhancement of hunter access to public lands prior to any land exchange of national forest land in the Dry Range.
- Use the Department's Block Management and Access Montana programs where appropriate.

POPULATION OBJECTIVES

- 1) Maintain the number of elk observed during post-season (late winter-early spring) aerial surveys within 20% of 950 elk (760-1,140). This objective number, along with the objective (1,100) for the West Big Belts EMU (HD 392) would result in an overall observed objective of 2,050 elk for the Big Belt Mountains. Because the majority of the hunting district is private land, the objective set for the East Big Belts EMU is based on a concern for landowner tolerance of elk. The EMU objective of 950 observed elk is a total of the following desired distribution of observed wintering elk: Highway 12 to Springdale Colony 175 elk; Springdale Colony to Birch Creek/Duck Creek Pass Road 175 elk; Birch Creek/Duck Creek Pass Road to Wagner Gulch/Lingshire Road 250 elk; Wagner Gulch Road to hunting district boundary 225 elk; and Beaver Creek/Dry Range area 125 elk.
- 2) Maintain a minimum of 67 bulls observed post-season aerial surveys or a minimum of 7% bulls within the number of elk observed during post-season aerial surveys.

POPULATION MANAGEMENT STRATEGIES

Managing to maintain the total number of observed elk within the objective range will be the priority. Cooperation in hunter access management from private landowners will be necessary to achieve this goal.

REGULATION PACKAGES

Six-week brow-tined bull/antlerless archery regulation EXCEPT, see Restrictive Regulations for Antlerless and Antlered elk and Liberal Regulation 2.) for Antlerless elk.

Antlerless:

<u>The Standard Regulation is:</u> brow-tined bull/antlerless regulation for any 9 days of the general season in all or portion of hunting district. Limited antlerless elk permits and over-the-counter antlerless A-9/B-12 licenses (B-tags) may be available as well, and may be valid prior to and/or after the general 5-week general season.

The Standard Regulation will be recommended if: the total post-season count of elk in the EMU is within 20% of the objective of 950 observed elk (760-1,140).

<u>The Liberal Regulation is:</u> **1.)** brow-tined bull/antlerless regulation for longer than 9 days of the general season (up to the full 5-weeks). Limited antlerless elk permits and overthe-counter antlerless A-9/B-12 licenses (B-tags) may be available as well, and may be

valid prior to and/or after the general 5-week general season. OR, **2.)** antlerless ONLY regulation for a portion or all of the general season. Archery regulations will also be Antlerless ONLY.

Liberal Regulation 1.) (above) will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU is more than 20% above the objective of 950 observed elk (more than 1,140).

Liberal Regulation **2.)** (**above**) will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU remains more than 20% above the objective of 950 observed elk (more than 1,140) after 2 years of application of Liberal Regulation 1.) (above).

<u>The Restrictive Regulation is:</u> limited antlerless permits. Archers will be also required to apply for antlerless permits.

The Restrictive Regulation will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU is more than 20% below the objective of 950 observed elk (760) for 2 consecutive years.

Antlered:

<u>The Standard Regulation is:</u> 5-week general season brow-tined bull regulation.

The Standard Regulation will be recommended if: the number of bulls observed during post-season aerial surveys is at least 53 or, at least 7% of the total observed elk are bulls.

<u>The Restrictive Regulation is:</u> **1.)** unlimited brow-tined bull or brow-tined bull/antlerless permits OR; **2.)** limited antlered bull or either-sex permits (including zero if necessary). ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED OR LIMITED ARCHERY ONLY PERMITS.

- 1.) Unlimited brow-tined bull or brow-tined bull/antlerless permits will be recommended if: both the number of bulls observed during post-season aerial surveys is less than 53 and less than 7% of the total observed elk are bulls for 2 consecutive years.
- **2.)** Limited antlered bull or either-sex permits (including zero if necessary) will be recommended if: after 2 years of application of Restrictive Regulation 1.) (above) both the number of bulls observed during post-season aerial surveys remains less than 53 and less than 7% of the total observed elk are bulls.

CASTLE MOUNTAINS EMU (Hunting Districts 449, 452)



Description: This 341-square-mile EMU is located south and east of White Sulphur Springs and is comprised of the area in and around the Castle Mountains. The Castle Mountains and the Little Belt Mountains were combined into one EMU in the 1992 Elk Plan. However, we separated the two mountain ranges into two EMU's for this elk plan to provide for more management flexibility. The principal land manager in the EMU is the USDA-Forest Service - Lewis & Clark National Forest (USFS). About 270 square miles of the land area (79%) is seasonal or yearlong elk habitat. Approximately 45% of the elk habitat in the EMU is public land. The majority of the winter range in the EMU (75%) is on private ranch land, which surrounds the Castle Mountains.

The elk population in this EMU is distributed among several herd units within hunting districts (HDs) 449 and 452. These herd units can best be described by the location of wintering concentrations of elk within each hunting district. In HD 449, wintering groups of elk are generally located on the southeast end of the Castle Mountains, from the area east of the Thomas Creek drainage west to the Bonanza Creek drainage, and on the north side of the Castle Mountains, from the Fourmile creek drainage east to the Eightmile and Hall Creek drainages. In HD 452, wintering groups of elk are generally located on the east and south sides of the Castle Mountains, from the Fords Creek drainage to the Warmsprings Creek drainage. Groups of elk are occasionally seen on the northwest end of the Castle Mountains from the Lone Willow Creek drainage east to the Fourmile Creek area.

Elk from these wintering concentration areas may mix during the summer and fall in the Castle Mountains. Some elk also move between the Castle Mountains and the north end of the Crazy Mountains during the year. Elk may also move back and forth between the Little Belt and Castle Mountains year round, particularly between the southwest corner of HD 454 and the north end of HDs 449 and 452 during winter. Elk may also occasionally move between HDs 452 and 391 during the year. Although most elk use of private lands occurs during winter, in recent years elk have begun to spend more time on private lands during other seasons of the year. This is true particularly in HD 452, where most of the private land is either outfitted, has restricted access, or is totally closed to hunting.

Public Access: The USFS road (USFS Rd #211-581) that is the boundary between hunting districts 449 and 452 is the primary access to the Castle Mountains and to the two hunting districts, and is in fact, the only public access to HD 452. All other public access to national forest land in the EMU is in HD 449. In addition to USFS Rd. #211-581, national forest land in HD 449 may be accessed via the Bonanza Creek Rd. (USFS Rd. #585) on the south side of the Castle Mountains, the Pasture Gulch Rd. (USFS Rd. #694) on the northeast end of the Castle Mountains, and by the Brooks Creek Rd. (USFS Rd. #581) out of Checkerboard on the north side of the Castles. All other access to national forest land in the EMU is across private land and is by landowner permission only.

Access to private land is somewhat less restricted in HD 449 compared to HD 452. Two small FWP Block Management Areas currently exist in HD 449.

Elk Populations: The number of elk observed in the Castle Mountains declined in the mid-to-late 1990's, but numbers have since increased to levels observed at the time of the 1992 Elk Management Plan (Figure 1). The primary reason for the recent increase has been the relative lack of hunting pressure on private land, which has resulted in the creation of elk "refuges" on private land. The average number of elk observed in the EMU during post-season aerial surveys (late winter-early spring) in 2001-2003 was 693 elk (range 633-793). The 3-year average was 519 elk (range 449-624) for HD 449 and 204 elk (range 168-275) for HD 452.

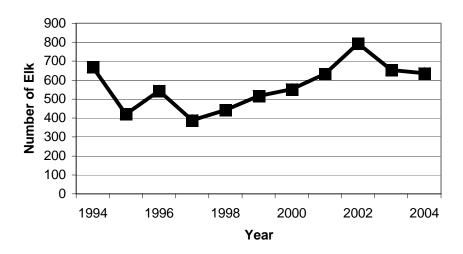


Figure 1. Number of elk counted during post-season aerial surveys in the Castle Mountain EMU, 1994-2004.

Recreation Provided: Hunting, camping, hiking, and trail riding are the primary forms of recreational use in the EMU. A significant portion of the extensive trail system in HD 452 is for non-motorized use only, which provides somewhat of a backcountry type

setting. More of HD 449 is open to motorized use when compared to HD 452. During 1999-2001, an annual average of 572 elk hunters hunted in HD 449 with an average of 2,827 hunter days of recreation. For HD 452, the annual average was 528 elk hunters and 2,440 hunter days of recreation during 1999-2001.

Current Annual Elk Harvest: Hunting district 452 has been managed under an antlered bull (either-sex the last 9 days) hunting regulation since 1994. Hunting district 449 was managed the same as HD 452 until 1996, when the either-sex portion of the season was eliminated. Since 1996, HD 449 has been managed with an antlered bull regulation for the entire hunting season. Both hunting districts have also had a variable number of antlerless permits available each year. The average annual harvest for 1999-2001 was 78 elk in HD 449 (30 antlered, 47 antlerless). In HD 452, the annual harvest for 1999-2001 was 100 (59 antlered, 42 antlerless).

Accomplishments: The last 9 days of the general season was made either-sex in 1994 in the EMU to help control the number of elk in the EMU. A general season either-sex youth hunt was implemented in 2002 in the EMU.

Management Challenges: Limited public hunting access to private land where large numbers of elk are located during the hunting season is the primary management challenge in this EMU. It is difficult for FWP to manage elk numbers through hunter harvest when substantial numbers of elk are concentrated on private lands due to outfitting or because access for hunters is severely restricted or in some cases nonexistent.

We estimate that only about 50% of the elk in the EMU (30-35% in HD 452 and 60% in HD 449) are available to the general public during the general hunting season. The rest of the elk in the EMU are on private property that is either outfitted, restricted to hunting by family and friends only, or is entirely closed to hunting during the general season. In 2001, nonresidents harvested more bulls in HD 452 than did residents (39 nonresidents compared to 30 residents). Continuation of this trend may lead to the public perception that antlered animals are being sold to nonresidents, while the resident hunters are left to clean up the antlerless population for population control. As a result, resident hunters may become disgruntled.

There are currently no wolves established in the Castle Mountains. However, wolves moving either north or south from areas that currently have wolves may eventually colonize this area.

Population Monitoring: Aerial trend surveys are accomplished on an annual basis between 1 January and 15 April using fixed wing aircraft. Because of budget limitations, generally only one survey is made annually. Conditions during the annual survey may vary considerably among years, thus results of single annual surveys are variable. Due to the difficulty of differentiating between cows and calves from fixed wing aircraft, often only the number of bulls (differentiated between yearlings and brow-tined bulls) and total

number of antlerless animals are recorded. Additional funds will be necessary to accomplish additional fixed wing flights, or to allow for helicopter surveys.

SUMMARY OF PUBLIC COMMENT

Lack of public access to private lands that hold elk during the hunting season is a major concern among the hunting public. Hunters feel that in some areas of the EMU that the majority of the elk are unavailable to them. The view of some resident hunters is that bull elk are being sold to nonresident hunters, and resident hunters are left to being the "cow cleanup crew". Some landowners view hunters as being as much or more of a problem than having too many elk. Private landowners in the EMU seem to be relatively tolerant of the current elk population level. However, the consensus seems to be that they don't want the population to increase and a reduction in elk numbers in some areas of the EMU would be desirable.

MANAGEMENT GOAL

- 1) Provide a season structure to allow for management of the elk population through hunter harvest, so that the number of elk observed during post-season aerial surveys is within the desired objective range.
- 2) Work with private landowners to try and increase the amount of public access to private land or access through private land to national forest land for hunting.
- 3) Continue to cooperate with public and private land managers to provide optimum elk habitat, and manage for a diversity of elk hunting experiences.

HABITAT OBJECTIVES

- 1) Develop cooperative programs that encourage public and private land managers to maintain 270 square miles of occupied elk habitat.
- 2) Maintain or enhance elk security levels, so that the elk harvest is distributed throughout the general hunting season, and more elk remain on national forest land during the general hunting season. Maintain or enhance elk security levels, so that no more than 40% of the bull harvest occurs during the first week of the season.

HABITAT MANAGEMENT STRATEGIES

FWP will:

Provide technical assistance to the Lewis & Clark National Forest to develop a
comprehensive road management plan that will maintain or enhance elk security
on national forest land during the hunting season, while still allowing adequate
access for hunters. The goal is to keep more elk on USFS land during the hunting
season, so that elk do not seek out private land refuge areas; thereby, improving
the opportunity for hunters to harvest elk on national forest land in the EMU.

- Provide technical assistance to public land management agencies to improve elk habitat conditions on public lands that will encourage elk use of public, rather than private lands.
- Encourage federal land management agencies to mitigate for any project that may have a negative impact on elk habitat or elk security levels.

GAME DAMAGE STRATEGIES

Game damage complaints in this EMU are limited, as most landowners do not qualify for game damage assistance under current FWP guidelines because they lease their hunting rights or restrict hunting access. The few damage complaints received usually involve elk grazing rangeland during some season of the year. Other types of damage may occur on a local basis as well. Maintaining observed elk numbers within the objective range is the best way to deal with and to prevent game damage problems.

ACCESS STRATEGIES

FWP will cooperate with the Lewis & Clark National Forest to help develop a comprehensive road management plan that enhances elk security on national forest land while still allowing adequate access for hunters to harvest elk. FWP will work with private landowners to try and enhance opportunities for additional public hunting on their property or increased access through their lands to public land, particularly in HD 452. FWP will use the Block Management and Access Montana programs where appropriate.

POPULATION OBJECTIVES

The objective for observed elk numbers in the EMU is based on landowner tolerance level, as the majority of the winter range in the EMU is on private land. The majority of the landowners contacted expressed the sentiment that the current elk population level is acceptable, however, they do not want the population to increase.

- 1) Maintain the number of elk observed during post-season (late winter/early spring) aerial surveys within 20% of 600 elk (480-720).
- 2) Maintain a minimum of 30 bulls observed during post-season aerial surveys, or a minimum of 5.0 % bulls among the total number of elk observed during post-season aerial surveys.

POPULATION MANAGEMENT STRATEGIES

Managing to maintain the total number of observed elk within the objective range will be the priority in setting the season structure. Cooperation from private landowners in regards to access management will be necessary to help prevent the current elk population from increasing past the desired objective.

REGULATION PACKAGES

Six-week either-sex archery regulation EXCEPT, see Restrictive Regulation for Antlered and Antlerless elk and Liberal Regulation 2.) for Antlerless elk.

Antlerless:

<u>The Standard Regulation is:</u> either-sex regulation for any 9 days of the general season in all or portion of the EMU AND, limited antlerless elk permits and/or antlerless A-9/B-12 licenses (B-tags) may also be available.

The Standard Regulation will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU is within 20% of the objective of 600 observed elk (480-720).

<u>The Liberal Regulation is:</u> **1.)** either-sex regulation for longer than 9 days of the general season (up to the full 5-weeks) in all or a portion of the EMU AND; limited antlerless permits and over-the-counter antlerless A-9/B-12 licenses (B-tags) may be available OR, **2.)** antlerless ONLY regulation for a portion or all of general season. Archery regulations will also be Antlerless ONLY.

Liberal Regulation 1.) (above) will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU exceeds the objective of 600 observed elk by more than 20% (more than 720 elk).

Liberal Regulation **2.)** (**above**) will be recommended if: after 2 years of Liberal Regulation 1.) (above) the total number of elk observed during post-season aerial surveys in the EMU remains above the objective of 600 observed elk by more than 20% (more than 720 elk).

<u>The Restrictive Regulation is:</u> limited antlerless permits. Archers would also be required to apply for the limited permits.

The Restrictive Regulation will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU is 20% or more below the objective of 600 observed elk (480 or fewer) for 2 consecutive years.

Antlered:

The Standard Regulation is: 5-week general season antlered bull regulation.

The Standard Regulation will be recommended if: the number of bulls observed during post-season aerial surveys is at least 30, or at least 5.0 % of the total elk observed during post-season aerial surveys are bulls.

<u>The Restrictive Regulation is:</u> **1.)** 5-week brow-tined bull regulation OR; **2.)** unlimited brow-tined bull/antlerless permits OR; **3.)** limited antlered bull or either-sex permits (zero if necessary). ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED OR LIMITED ARCHERY ONLY PERMITS.

- 1.) Brow-tined bull regulations will be recommended if: both the number of bulls observed during post-season aerial surveys is less than 30, and less than 5.0 % of the total elk observed during post-season aerial surveys are bulls for 2 consecutive years.
- **2.)** Unlimited brow-tined bull/antlerless permits will be recommended if: after 2 years of application of Restrictive Regulation 1.) (above) both the number of bulls observed during post-season aerial surveys remains less than 30, and less than 5.0 % of the total elk observed during post-season aerial surveys are bulls.
- **3.)** Limited antlered bull or either-sex permits will be recommended if: after 2 years of application of Restrictive Regulation 2.) (above) both the number of bulls observed during post-season aerial surveys remains less than 30, and less than 5.0 % of the total elk observed during post-season aerial surveys are bulls.

<u>LITTLE BELT EMU</u> (Hunting Districts 413, 416, 418, 420, 432, 448, 454, 540)



Description: This 3,585-square-mile EMU encompasses the area in and around the Little Belt Mountains, which are located south and east of Great Falls, and north and east of White Sulphur Springs. In the 1992 Elk Plan the Castle Mountains and the Little Belt Mountains were combined into one EMU. However, we have separated the two mountain ranges into 2 EMUs for this elk plan to provide for more management flexibility. The principal land manager in the EMU is the USDA-Forest Service-Lewis & Clark National Forest (USFS). Approximately 65% of the 1,648 square miles of occupied elk habitat in the EMU is public land. About 66% of the winter range is located on private land, with the remainder on public land and FWPs Judith River (JRWMA) and Haymaker Wildlife Management Areas (HWMA). Although most elk use of private land in the EMU occurs during the winter, elk in recent years have begun to increasingly use private lands more during other seasons of the year as well. Private land, including coniferous elk habitat, surrounds the Little Belt Mountains and is primarily used for cattle ranching.

The elk population contains multiple herd units in the EMUs eight hunting districts best described by the location of wintering concentration areas of elk. In hunting district (HD) 413, elk are primarily concentrated in the Black Butte vicinity, usually north or east of Black Butte and in the Riceville-Nasen area to the north and east of Tiger Butte. Occasionally, wintering elk may be seen in the Deep Creek Park area. In HD 432, wintering elk are primarily concentrated in the Otter Creek area east of Otter Mountain, and in the Jackson Coulee area west of Lone Tree Creek. Elk may also occasionally cross U.S. Highway 89 from HD 413 during the winter into the Rattlesnake Butte area of HD 432. The primary concentration area of wintering elk in HD 448 is the Mary's Knoll area. In HD 420, the primary elk wintering area is the 9,840-acre JRWMA and the private and public land in close proximity. The majority of the elk wintering on the JRWMA disperse throughout the Little Belt Mountains. The main migration routes for elk leaving the JRWMA are the Lost Fork and Middle Fork drainages of the Judith River, and the Yogo Creek drainage. The primary elk wintering area in HD 418 is in the vicinity of the Antelope Creek drainage, just north of the national forest boundary. In HD 540, the primary elk wintering concentration areas are between Antelope Creek and Roberts Creek on the southeast side of the Little Belts, the HWMA and surrounding area, and the Baxter Gulch-Alkali Creek area between Findon Lane and the Spring Creek Road. The largest concentration is usually found from the HWMA to Findon Lane. In HD 454, wintering concentrations of elk are found in the Volcano Butte area, and from the Ice Creek drainage west to the Butler Hill area. Elk wintering in HD 454 may also move across U.S. Highway 12 into the northeast corner of HD 452 or the northwest corner of HD 449. Wintering concentrations of elk in HD 416 are found in the Park Hills area, the area northeast of Sheep Mountain south of Sheep Creek, and in the northwest corner of the hunting district from the Strawberry Gulch area west to the Smith River. Elk wintering in the Butler Hills area of HD 454 and in the Park Hills area of HD 416 may occasionally move between the two hunting districts across U.S. Highway 89. Elk from all wintering concentration areas mix on summer-fall range in the Little Belt Mountains. In addition, some elk move between the Little Belt and Castle Mountains.

Public Access: Access varies across the EMU and among hunting districts. Portions of the EMU currently have high road densities, providing easy access by vehicle, but other areas are reasonably remote and better suited to backcountry types of recreation. Public access to private lands on the periphery of the Little Belt Mountains has become very restricted in recent years, resulting in increased hunting pressure on adjacent national forest lands, as well as private lands still open to the public. Some landowners have leased hunting rights to outfitters, and many landowners have just closed their property to hunting altogether or to anybody other than immediate family and friends. Access to private lands that have elk during the hunting season is especially limited in HDs 413, 416, 540, and the west half of HD 454. In some areas, reductions in elk security on public lands and the closure of large blocks of private land to the general public have resulted in concentrations of elk on private lands during the hunting season where they are unavailable to the general public.

Elk Populations: Numbers of elk observed during post-season aerial surveys in this EMU have increased since the 1992 Elk Management Plan (Figure 1). The average number of elk observed in the EMU during post-season (late winter-early spring) aerial surveys in 2001-2003 was 3,828 elk (range 3,170-4,448). The 3-year average by hunting district was: HD 413 - 536 elk (range 383-657); HD 432 - 374 elk (range 326-424); HDs 420/448 - 1,093 elk (range 772-1,323); HD 418 - 170 elk (range 147-210); HD 540 - 729 elk (range 647-838); HD 454 - 305 elk (range 258-378); and HD 416 - 616 elk (range 326-942).

Recreation Provided: Hunting, camping, hiking, and winter recreational sports such as riding snowmobiles and skiing are the primary forms of recreation in the Little Belt Mountains. Four-wheeling is also a popular sport in the Little Belts. The Little Belt Mountains are heavily utilized for recreational activities because of their proximity to two of Montana's largest cities, Billings and Great Falls. In addition, the Little Belt Mountains is one of the first areas with general elk hunting encountered by hunters traveling west from eastern Montana. It is also one of the last large contiguous geographic areas open to any antlered bull hunting. Hunting experience opportunities vary in the Little Belts from areas that currently have fairly high road densities to areas

that are reasonably remote and more suited to a backcountry type hunting experience. The average number of hunters and hunter days for the hunting districts in the Little Belts EMU during 1999-2001 were as follows: HD 413 – 1,340 hunters, 6,790 hunter days; HD 432 – 1,206 hunters, 6,044 hunter days; HD 448 – 1,349 hunters, 6,003 hunter days; HD 420 – 234 hunters, 1,239 hunter days; HD 418 – 818 hunters, 4,196 hunter days; HD 540 – 873 hunters, 4,524 hunter days; HD 454 – 984 hunters, 4,739 hunter days; and HD 416 – 1,712 hunters, 8, 993 hunter days.

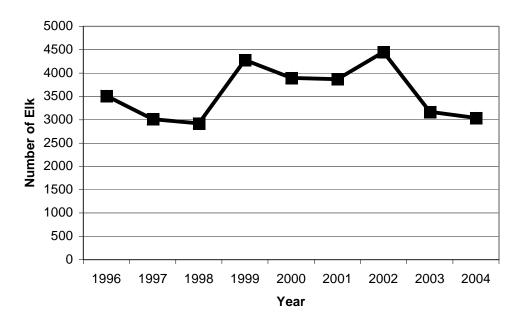


Figure 1. Number of elk counted during post-season aerial trend surveys in the Little Belt EMU, 1996-2004.

Current Annual Elk Harvest: The average total annual harvest for the Little Belts EMU during 1999-2001 was 1,009 elk (517 antlered, 483 antlerless). The 3-year average harvest by hunting district was: HD 413 - 185 elk (83 antlered, 100 antlerless); HD 432 – 142 elk (78 antlered, 63 antlerless); HD 448 - 146 elk (60 antlered, 84 antlerless); HD 420 - 41 elk (21 antlered, 19 antlerless); HD 418 - 71 elk (33 antlered, 37 antlerless); HD 540 - 111 elk (66 antlered, 44 antlerless); HD 454 - 88 elk (55 antlered, 32 antlerless) and; HD 416 - 226 elk (122 antlered, 103 antlerless).

Accomplishments: Increased opportunity for the general hunter to harvest antlerless elk (last 9 days either-sex) was implemented in 1994 in much of the EMU to help control the number of elk. A general season either-sex youth hunt was implemented in 2002 in most of the EMU. The size of the Judith River Wildlife Management Area was increased by approximately 4,036 acres through two separate land acquisitions in the 1990s, increasing the amount of publicly owned winter range.

Management Challenges: Limited public hunting access to private land where large numbers of elk are located during the hunting season is the primary management

challenge in this EMU. It is difficult for FWP to manage elk numbers through hunter harvest when substantial numbers of elk are concentrated on private lands due to outfitting or because access for hunters is severely restricted or in some cases nonexistent.

We estimate that only about 25% of the elk in HD 413 are available to the general public throughout the general hunting season. The majority of the elk in the hunting district are in areas where public hunting opportunities are limited, especially for bulls. Opportunities for harvest of antlerless elk are somewhat more available than for bulls in the hunting district. Outfitting is fairly limited in HDs 432, 448, 418, and 540, although, there is quite a bit of private land where hunting access is restricted to mainly family and friends. However, the vast majority of elk in these hunting districts are available to the general public during at least a portion of the general hunting season mainly because of generally small ranch sizes. Even in those areas that are outfitted, or where hunting access is limited to family and friends, enough hunting pressure is usually applied to periodically move elk back onto public land, or onto other private property that is open to hunting by the general public. As a result, elk often move between public and private land during the hunting season in these hunting districts. Therefore, private land "refuge" areas are limited to nonexistent in these hunting districts.

Hunting district 420 is open to hunting by permit only, but the majority of the elk in this hunting district are available to permit holders. However, the number of elk present in the hunting district during the general season is often weather dependent. A large percentage of HD 454 is open for public access, but 50% or more of the elk in the hunting district are unavailable to the public during the general season because of a large block of private land that currently has restricted hunting access. The relative lack of hunting pressure on this large block of private land has resulted in the creation of a "refuge" for elk.

General public access to private land for hunting in HD 416 is currently limited. However, we estimate that a little more than 50% of the elk in the hunting district are on national forest land during some portion of the general hunting season and are available to the public. The majority of the rest of the elk in the hunting district are in areas where access for hunting is generally limited to family and friends.

There are currently no known wolf packs established in the Little Belt Mountains. However, wolves moving either north or south from areas that currently have wolves may eventually colonize the area.

Population Monitoring: Aerial trend surveys are accomplished on an annual basis between 1 January and 15 April using fixed wing aircraft. Because of budget limitations, generally only one survey per hunting district is made annually. Conditions during the annual survey may vary considerably among years, thus results of single annual surveys are variable. Due to the difficulty of differentiating between cows and calves from fixed wing aircraft, often only the number of bulls (differentiated between yearlings and brow-

tined bulls) and total number of antlerless animals are recorded. Additional funds will be necessary to accomplish additional fixed wing flights, or to allow for helicopter surveys.

SUMMARY OF PUBLIC COMMENT

Lack of public access to private lands that hold elk during the hunting season is a major concern among the hunting public. Private landowners in some areas of the EMU feel that they have too many elk and would like to see numbers reduced. Hunters consider the majority of the elk to be unavailable to them in some areas of the EMU. The view of some resident hunters is that in areas of the EMU, bull elk are being sold to nonresident hunters, and resident hunters are left to being the "cow cleanup crew". The general opinion of the hunting public is that landowners who either outfit or allow limited to no access for hunting should not complain about having too many elk if they won't let people in to harvest elk. Some landowners regard hunters as being as much or more of a problem than having too many elk. Some of the public feels that USFS road closures limit access and opportunity to harvest elk, while others feel that there are too many roads. Lastly, some of the hunting public believes that ATV use has ruined the quality of hunting in areas of the EMU.

MANAGEMENT GOAL

- 1) Provide hunting regulations that allow for management of the elk population through hunter harvest, so that the number of elk observed during post-season aerial surveys is within the desired objective range.
- 2) Work with landowners in areas where hunter access is limited to try and increase the amount of public access to private land and/or through private land to national forest land for hunting.
- 3) Continue to cooperate with public and private land managers to provide optimum elk habitat, and manage for a diversity of elk hunting experiences.

HABITAT OBJECTIVES

- 1) Develop cooperative programs that encourage public and private land managers to maintain 1,648 square-miles of occupied elk habitat.
- 2) Maintain or enhance elk security levels, so that the elk harvest is distributed throughout the general hunting season, and more elk remain on national forest land during the general hunting season. Maintain or enhance elk security levels so that no more than 40% of the bull harvest occurs during the first week of the season.

HABITAT MANAGEMENT STRATEGIES

FWP will:

Provide technical assistance to the Lewis & Clark National Forest to help develop
a comprehensive road management plan that will maintain or enhance elk security
on national forest land during the hunting season, while still allowing adequate
access for hunters. The goal is to keep more elk on USFS land during the hunting

- season, so that elk do not seek out private land "refuge" areas; thereby, improving the opportunity for hunters to harvest elk on national forest land in the EMU.
- Provide technical assistance to public land management agencies on projects that will enhance elk habitat on public lands, encouraging elk to use public lands rather than private lands.
- Encourage federal land management agencies to mitigate for any project that may have a negative impact on elk habitat or elk security levels.
- Provide technical assistance to public land management agencies and interested private landowners in developing grazing practices and systems that will maintain or improve the quality of seasonal elk ranges.
- Develop a new management plan for the Judith River Wildlife Management Area to include management practices that will potentially enhance habitat on the WMA for elk. Such management practices may include reseeding of existing stands of smooth brome and other grass species unpalatable to elk, prescribed burning, livestock grazing, timber harvest, and noxious weed control.

GAME DAMAGE STRATEGIES

Game damage complaints in this EMU occur primarily on the north side of the Little Belt Mountains. The few damage complaints received usually involve elk grazing rangeland during some season of the year. There have been problems with elk getting into haystacks in the winter in the past, but these have generally been resolved by fencing the haystacks. Game damage complaints are limited on the south side of the EMU because the majority of private landowners lease hunting rights or have restricted hunting access. As a result, most landowners on the south side of the Little Belt Mountains do not qualify for game damage assistance under current FWP guidelines. FWP will work with private landowners to try and increase access to private land in areas where game damage may be a problem on the north side of the Little Belt Mountains. Reducing observed elk numbers to the objective level by hunting will best prevent future game damage problems.

ACCESS STRATEGIES

FWP will:

- Work with the Lewis & Clark National Forest to help develop a comprehensive road management plan that enhances elk security on national forest land while still allowing adequate access for hunters to harvest elk on federal land.
- Continue to work with private landowners to try and enhance opportunities for additional public hunting on their property or increased access through their property to public land.
- Use the Department's Block Management and Access Montana programs where appropriate.

POPULATION OBJECTIVES

- 1) Maintain the number of elk observed during post-season (late winter-early spring) aerial surveys within 20% of 3,500 elk (2,800-4,200). Because a high percentage of elk winter range in the EMU is on private land, the objective for observed numbers of elk in the Little Belts EMU is based on concern for private landowner tolerance of elk. The EMU objective of 3,500 observed elk is derived from the following desired distribution of observed wintering elk for each hunting district within the EMU: HD 413 500 elk; HD 416 475 elk; HD 418 150 elk; 420/448 1,200 elk; HD 432 325 elk; HD 454 250 elk; and HD 540 600 elk.
- 2) Maintain a minimum of 175 bulls observed during post-season aerial surveys, or a minimum of 5.0 % bulls among the total elk observed during post-season surveys.

POPULATION MANAGEMENT STRATEGIES

Managing to maintain the total number of observed elk within the objective range will be the priority. Cooperation in hunter access management from private landowners will be necessary in some hunting districts in order to achieve this goal. As much as possible, the hunting districts comprising the Little Belt EMU will be managed as a cohesive unit with similar regulation packages.

REGULATION PACKAGES

Six-week either-sex archery regulation EXCEPT, see Restrictive Regulation for Antlered and Antlerless elk and Liberal Regulation 2.) for Antlerless elk.

Antlerless:

<u>The Standard Regulation is:</u> either-sex regulation for any 9 days of general season in all or a portion of the EMU AND, limited antlerless elk permits and antlerless A-9/B-12 licenses (B-tags) may be available and may be valid before and after the 5-week general season.

The Standard Regulation will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU is within 20% of the objective of 3,500 observed elk (2,800-4,200).

<u>HD 420: The Standard Regulation is:</u> limited antlerless permits valid in both HD 420 and HD 448.

The Standard Regulation will be recommended if HD 448 is in a Standard Regulation.

<u>The Liberal Regulation is:</u> **1.)** either-sex regulation for longer than 9 days of the general season (up to the full 5-weeks) in all or a portion of the EMU AND, limited antlerless and antlerless A-9/B-12 licenses (B-tags) may be available OR, **2.)** antlerless ONLY regulation for a portion or all of the general season. Archery regulations will also be

antlerless ONLY. The Liberal Regulations may be recommended in any individual HD that exceeds its individual objective by more than 20 %.

Liberal Regulation 1.) (above) will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU exceeds the objective of 3,500 observed elk by more than 20% (more than 4,200 elk).

Liberal Regulation **2.)** (**above**) will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU remains above the objective of 3,500 observed elk by more than 20% (more than 4,200 elk) after 2 consecutive years of Liberal Regulation 1.) (above).

<u>The Restrictive Regulation is:</u> limited antlerless permits. Archers will also be required to apply for limited archery-only permits. The Restrictive Regulation may be recommended in any individual HD that is below its individual objective by more than 20 %.

The Restrictive Regulation will be recommended if: the total number of elk observed during post-season aerial surveys in the EMU is more than 20% below the objective of 3,500 observed elk (less than 2,800 elk) for 2 consecutive years.

Antlered:

The Standard Regulation is: 5-week general season antlered bull regulation.

The Standard Regulation will be recommended if: the number of bulls observed during post-season aerial surveys is at least 175, or at least 5.0 % of the total elk observed during post-season aerial surveys are bulls.

<u>HD 420: The Standard Regulation is:</u> limited either-sex permits.

The Restrictive Regulation is: 1.) 5-week general season brow-tined bull regulation OR 2.) unlimited brow-tined bull/antlerless permits OR, 3.) limited antlered bull or eithersex permits (zero if necessary). ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED OR LIMITED ARCHERY ONLY PERMITS.

- 1.) A brow-tined bull regulation will be recommended if: both the number of bulls observed during post-season aerial surveys is less than 175, and less than 5.0 % of the total elk observed during post-season aerial surveys are bulls for 2 consecutive years.
- **2.)** Unlimited brow-tined bull/antlerless permits will be recommended if: after 2 years of application of Restrictive Regulation 1.) (above) both the number of bulls observed during post-season aerial surveys is less than 175, and less than 5.0 % of the total elk observed during post-season aerial surveys are bulls.
- 3.) Limited antlered bull or either-sex permits will be recommended if: after 2 years of application of Restrictive Regulation 2.) (above) both the number of bulls observed

during post-season aerial surveys is less than 175, and less than 5.0 % of the total elk observed during post-season aerial surveys are bulls.

HD 420: The Restrictive Regulation is: limited brow-tined bull/antlerless permits.

DEVILS KITCHEN EMU (HD's 445, 455)



Description: This 751-square-mile EMU encompasses the north portion of the Big Belt Mountains between Great Falls and Helena. The EMU includes the Beartooth Wildlife Management Area (BTWMA) and a portion of the Gates of the Mountains Wilderness Area (together comprising most of HD 455). Several large ranches operate in the vicinity of these public lands. Elk occupy about 534 square miles (71%) of the land base, of which 137 square miles (26%) are public land. Habitat consists of foothill-grassland communities and the forested Big Belt Mountain range.

Public Access: There is good access to public lands in this EMU. Some landowners in HD 445 have increased public elk hunting opportunities on private land through the FWP Block Management Program. Others also provide access to public lands. The 277,000 acres of private land fall into one of three access categories: closed, limited or open to public hunting opportunities. Approximately 5% of the private land is closed, 55% is limited and 40% is open to public hunting. Private landowners play a critical role in proper management of the elk herd in this EMU.

Elk Populations: There are five distinct wintering areas in HD 445: the Jones Hills, the Smith River corridor, the Bird Creek area, Sheep Creek, and the head of Hound Creek. There are also a few small wintering groups scattered throughout the HD. Numbers of elk observed during post-season aerial surveys have declined since the mid-1990s by prescription (Figure 1). During post-season aerial surveys in 2002-2003, 662 elk were observed in HD 445 (Jones Hills - 258; Smith River corridor - 203; Bird Creek - 98; Sheep Creek - 62; Hound Creek - 41). The BTWMA serves as a winter range for elk from HD 455 and some elk migrating from HD 445. In winter 2002-2003, 505 elk were observed during post-season aerial surveys on the BTWMA in HD 455. An additional 400-500 elk are part time residents of both HD 445 and HD 446, and spend winter months near the boundary of these two HDs.

Recreation Provided: During 1999-2001, the EMU provided an annual average of 7,576 hunter days of recreation for 1,702 hunters. Opportunities to view wildlife on public lands abound during summer and fall months. Winter elk viewing opportunities are limited due to migration of elk onto public winter ranges, on which public access is restricted from 1 December to 15

May to minimize wildlife disturbance. Elk and wildlife viewing occurs from public roads in HD 445 throughout the year.

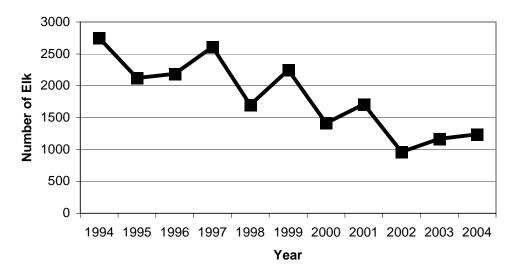


Figure 1. Number of elk counted during post-season aerial trend surveys in the Devil's Kitchen EMU, 1994-2004.

Annual Elk Harvest: During 1999-2001, the average annual harvest in HD 445 was 261 elk, of which, 100 (62%) were bulls. Forty-four percent of these harvested bulls had antlers with at least 6 points on at least one side. Eighty four percent (84%) of these harvested bulls were browtined bulls (BTBs). The average annual harvest was 111 elk in HD 455 during 1999-2001. An average of 30 (27%) were bulls, of which, 39% had antlers with at least 6 points on at least one side. Eighty four percent (84%) of these harvested bulls were BTBs.

Accomplishments: "The Devil's Kitchen Working Group" addresses issues regarding elk, wildlife and land management, and public hunting opportunities on private land in the EMU. Members of the group include landowners, sportsmen, outfitters, and FWP personnel. The group has successfully developed and pursued elk management goals and objectives for HD 445 and the BTWMA. The Block Management program has also helped landowners manage elk herds within tolerable limits, while providing public hunting opportunities in HD 445. Habitat enhancement projects have been developed, such as a rest-rotation grazing system between the BTWMA and a private landowner to enhance range productivity and winter range conditions for elk, both on the BTWMA and on private lands.

Management Challenges: Observed numbers of elk wintering on the BTWMA have been below objective levels the past five years. This decline may be due to distributional changes resulting from lack of heavy winter snow cover the past few years, high hunting pressure and harvest in past liberal hunting seasons, or some movement onto private lands. Observed numbers of wintering elk also declined in HD 445 from an average of 1,005 elk during 1993-2000 to an average of 628 elk during 2001-2002. This decline was probably the result of the liberal antlerless regulations that were in place from 1994-2001 in the HD and EMU.

Challenges will include allowing the wintering elk herd on the BTWMA to grow to the objective levels of 1,500 elk and stabilizing numbers of wintering elk in HD 445 at 700 animals.

Population Monitoring: We survey elk winter ranges 1-2 times annually by fixed-wing aircraft during January-March. The BTWMA is surveyed 2-3 times per year during the same period. During aerial surveys, total numbers of elk, location, and sex and age composition are recorded.

SUMMMARY OF PUBLIC COMMENT

Public comment has generally been favorable regarding the EMU objectives and plan. Most agree with slowly increasing elk numbers toward the objective, but would like to see more of the fall and winter distribution of elk occur on the BTWMA rather than on private lands.

MANAGEMENT GOALS

Maintain total elk numbers within habitat capability and at a level acceptable to both landowners and sportsmen. Produce older age class bulls, while maintaining a diverse age structure.

HABITAT OBJECTIVES

Develop cooperative programs that encourage public and private land managers to maintain and/or enhance productive elk habitat. Enhance wintering habitat conditions on the BTWMA through habitat manipulation techniques to attract elk from neighboring private lands during the late winter months to relieve future game damage problems.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Continue to cooperate with the Helena National Forest in planning future management actions that may arise in the Gates of the Mountains Wilderness Area (HD 455).
- Continue to improve the quality and quantity of elk habitat on the Beartooth WMA by means of habitat manipulations such as grazing programs, hay field renovations, aspen stand enhancement, and recreation management.
- Develop cooperative livestock grazing programs with private landowners to maintain and/or enhance habitat conditions on the BTWMA and adjacent private land winter ranges.
- Develop, and periodically update, management guidelines and a management plan for the BTWMA.
- Coordinate with, and seek recommendations from, interest groups and advisory committees concerning elk management issues on private lands.

GAME DAMAGE STRATEGIES

Only one game damage complaint has been reported during the past three years. To keep game damage complaints minimal, we will continue to seek cooperative solutions to elk related problems on both private and public land in the EMU. This includes participating on the Devil's

Kitchen Working Group, (which includes representatives from the landowner community in HD 445, sportspersons, and representatives from other public land management agencies). Also, provide forage on the BTWMA for 1,500 wintering elk through management of public use, proper grazing practices, and habitat manipulation techniques. Habitat manipulation and restrotation grazing on the BTWMA will be used as a tool to attract wintering elk from neighboring private lands to minimize game damage complaints.

ACCESS STRATEGIES

Hunting opportunity on private land is a major factor influencing proper elk management in this EMU. Many landowners in the EMU allow elk hunting opportunities during the archery and general seasons. We intend to work with public and private land managers to increase walk-in public hunting access to public lands. This includes use of the Access Montana Program. We also will work with private landowners to continue and/or increase Block Management Programs and walk-in hunting opportunities on private lands.

POPULATION OBJECTIVES

- 1.) Maintain the number of elk observed during post-season aerial surveys in the EMU within 20% of 2,200 elk (1,760-2,640). Population objectives by area are 1,500 elk on the BTWMA (HD 455) and 700 elk in HD 445.
- 2.) In HD 445, provide a bull harvest comprised of at least 75% BTBs, while maintaining a diverse age structure. In HD 455 (BTWMA), provide a bull harvest comprised of at least 60% BTBs, while maintaining a diverse age structure.

POPULATION MANAGEMENT STRATEGIES

A liberal season structure was in place in the EMU from 1994-2001 to reduce antlerless elk numbers. Seven hundred antlerless permits were issued annually in HD 455 from 1994 to 1999. We reduced antlerless permit numbers to 500 in 2000 and to 325 permits in 2001. In 2002, we reduced antlerless permits to 25 and to 20 in 2003 to allow elk numbers to increase to objective levels. Currently, elk numbers in HD 445 are at a level more tolerable landowners.

REGULATION PACKAGES

Six-week either-sex archery regulation, EXCEPT see Restrictive Regulation for Antlered elk and Liberal Regulation for Antlerless elk in HD 445.

HD 445:

Antlerless:

<u>The Standard Regulation is:</u> either-sex general season regulation of variable length (up to 5-weeks) AND, additional limited antlerless permits may be recommended.

The Standard Regulation will be recommended if: the number of elk observed during post-season aerial surveys is within 20% (560- 840 elk) of the population objective number (700 elk).

<u>The Liberal Regulation is:</u> general season antlerless ONLY regulation of variable length (up to 5-weeks). Archery regulations will also be Antlerless ONLY.

The Liberal Regulation will be recommended if: the number of elk observed during post-season aerial surveys is more than 20% above (more than 840 elk) the population objective number (700 elk).

The Restrictive Regulation is: limited antlerless permits.

The Restrictive Regulation will be recommended if: the number of elk observed during post-season aerial surveys more than 20% below (less than 560 elk) of the population objective number (700 elk) for 2 consecutive years.

Antlered:

The Standard Regulation is: 5-week general season antlered bull regulation.

The Standard Regulation will be recommended if: more than 75% of harvested bulls are browtined bulls.

<u>The Restrictive Regulation is:</u> limited either-sex permits. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR LIMITED ARCHERY ONLY PERMITS.

The Restrictive Regulation will be recommended if: less than 75% of harvested bulls are browtined bulls for 2 consecutive years.

HD 455:

Antlerless:

The Standard Regulation is: limited (250-350) antlerless permits.

The Standard Regulation will be recommended if: numbers of elk observed during post-season aerial surveys within 20% (1,200-1,800 elk) of the population objective number (1,500 elk).

<u>The Liberal Regulation is:</u> limited (more than 350) antlerless permits also valid earlier and/or later than existing general season.

The Liberal Regulation will be recommended if: numbers of elk observed during post-season aerial surveys are more than 20% above (more than 1,800 elk) the population number objective (1,500 elk).

<u>The Restrictive Regulation is:</u> no antlerless harvest, or a very limited number of antlerless permits (less than 250).

The Restrictive Regulation will be recommended if: numbers of elk observed during post-season aerial surveys are more than 20% below (less than 1,200 elk) the population objective number (1,500 elk).

Antlered:

The Standard Regulation is: limited either-sex permits (approximately 70).

The Standard Regulation will be recommended if: more than 60% of harvested bulls are browtined bulls.

<u>The Restrictive Regulation is:</u> limited either-sex permits (less than 70). ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR LIMITED ARCHERY ONLY PERMITS.

The Restrictive Regulation will be recommended if: less than 60% of harvested bulls are browtined bulls for 2 consecutive years.

BIRDTAIL HILLS EMU (Hunting Districts 421 and 423)



Description: This 542-square-mile EMU contains about 273 square miles of elk habitat. About 90% of this EMU is private land. Throughout the year, nearly all elk are associated with private land. The western edge of HD 423 is the Continental Divide as it comes south from the Rogers Pass area on Highway 200. Moving east through timbered ridges to open reefs and grasslands, the rolling and timbered Birdtail Hills north of Interstate 15 in HD 421 represent the easternmost extent of elk habitat in these districts. Agriculture production includes grain, hay production and pasture.

Public Access: Access in these districts is extremely limited. Several key properties offer extremely limited hunting access and act as refuges for large numbers of elk. Hunter outfitting operations keep several properties closed to non-outfitted hunters. Dependent on daily distribution, over 90% of these elk may be unavailable to the general public hunter because of private land refuges, leased hunting, and other similar factors.

Elk Populations: Near the common boundary between HDs 421 and 423 (Highway 287), winter observations of elk typically number approximately 850 animals (Figure 1). The elk are relatively evenly distributed between the two hunting districts with elk moving east into the Birdtail Hills and west towards the Continental Divide during non-winter months.

Recreation Provided: During 1999-2001, an annual average of 2,940 hunter days of recreation were provided for 644 hunters in the EMU. Outfitted day hunting is prevalent throughout the EMU with limited non-outfitted day hunting. Because of the presence of outfitting and/or trespass fees and essentially no public lands, the elk in this EMU are largely unavailable to the general public. Elk presence near Highway 287 during winter months provides some viewing opportunities.

Current Annual Elk Harvest: During 1999-2001, an annual average of 118 elk, comprised of an average 56 antlerless and 62 antlered elk, was harvested in the EMU. Given average sex/age composition of the approximately 850 observed elk, an annual harvest of at least 100 antlerless elk is required to hold the population stable. Substantially greater antlerless harvest than in the past will be necessary to reduce the population to the objective level.

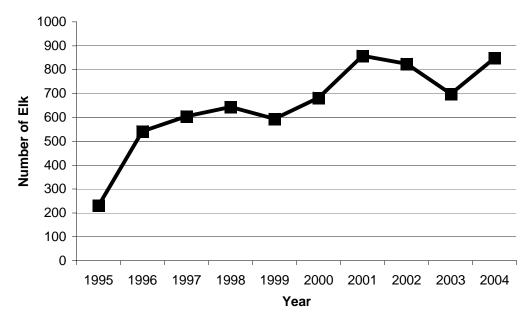


Figure 1. Number of elk counted during post-season aerial trend surveys in the Birdtail Hills EMU, 1995-2004.

Accomplishments: FWP acquired a conservation easement on over 3,000 acres of the Bay ranch in HD 423. Easement terms provide public elk hunting access, dictate grazing prescription and limit housing/commercial development. FWP has improved communication with some landowners in this EMU and potential solutions to game damage problems are being addressed. Block management on 2 private properties has improved public access.

Management Challenges: Lack of significant hunter access associated with properties either outfitted or closed to hunting have essentially ensured that levels of antlerless harvest necessary to reduce the elk population cannot be achieved under past regulation types. Seasons for antlerless elk (permits) and/or the A-9/B-12 license (B-tags) for antlerless elk extended outside the outfitted general season offer some hope for increased antlerless harvest.

Population Monitoring: We annually accomplish post-season aerial trend surveys during winter by fixed-wing aircraft. We record total elk numbers and bull numbers.

SUMMARY OF PUBLIC COMMENT

Most public comment has been from landowners relative to game damage. Public comment has been minimal because of extremely limited public hunting access and thereby, limited interest from hunters.

MANAGEMENT GOAL

Within landowner tolerance levels, maintain some presence of elk for public enjoyment. Through use of creative regulations, attempt to provide maximum use of general public hunting to manage elk population level.

HABITAT OBJECTIVES

Maintain quality habitat for elk and preserve/improve soil, water and vegetation quality.

HABITAT MANAGEMENT STRATEGIES

Habitat management is the prerogative of the private landowner (about 90% of the EMU) or public land manager. FWP will provide technical assistance as requested on elk habitat issues. FWP will also maintain communication with landowners to provide technical assistance on any elk habitat issues that might be addressed by conservation easement programs.

GAME DAMAGE STRATEGIES

Game damage occurs as late spring, summer and early fall use of pastures and agricultural crops by large groups of elk. The availability of antlerless permits valid starting 15 August has helped alleviate some late summer/early fall game damage. Use of A-9/B-12 antlerless elk licenses valid on private land outside the general season may also reduce game damage.

ACCESS STRATEGIES

Maintain communication with landowners to explore possibilities of increased public hunting access.

POPULATION OBJECTIVES

- 1.) Maintain the total number of elk observed during post-season aerial surveys in the EMU within 20% of 500 total elk (400-600).
- 2.) Maintain more than 5 bulls:100 cows observed during post-season aerial surveys.

POPULATION MANAGEMENT STRATEGIES

Develop and/or maintain an appropriate level of antlerless harvest, access to private land will be key. Priority will be given to developing regulation types and season formats that encourage landowners to allow public hunting access.

REGULATION PACKAGES

Six-week either-sex archery regulation [A-9/B-12 license (B-tag) also valid if issued], EXCEPT, see Liberal Regulation **2.**) for Antlerless elk.

Antlerless:

The Standard Regulation is: 5-week general season either-sex (HD 421) or brow-tined bull/ antlerless (HD 423) regulation AND, limited antlerless permits valid in either HD 421 or 423 before the general season and a 2nd group of limited antlerless permits valid in either HD 421 or 423 after the general season.

The Standard Regulation will be recommended if: Total elk numbers observed during post-season aerial surveys are in the range of 400-600.

The Liberal Regulation is: 1.) 5-week general season either-sex (HD 421) or brow-tined bull/ antlerless (HD 423) regulation with limited antlerless permits valid in either HD 421 or 423 before the general season and another set of limited antlerless permits valid in either HD 421 or 423 after the general season AND, unlimited over-the-counter antlerless A-9/B-12 licenses (B-tags) available for use in either district during the archery and general seasons. Holders of the limited antlerless permits could also utilize an elk A-9/B-12 license during the extended period their antlerless permit was valid OR, 2.) 5-week general season antlerless ONLY regulation in HDs 421 and 423 with limited antlerless permits valid in either HD 421 or 423 before the general season and another set of limited antlerless permits valid in either HD 421 or 423 after the general season AND, unlimited over-the-counter A-9/B-12 licenses (B-tags) available for use in either district during the archery and general seasons. Holders of the limited antlerless permits could also utilize the elk A-9/B-12 licenses during the extended period their antlerless permit was valid.

Liberal Regulation 1.) (above) will be recommended if: number of elk observed during post-season aerial surveys is above 600.

Liberal Regulation **2.)** (above) will be recommended if: number of elk observed during post-season aerial surveys remains above 600 despite 2 consecutive years of application of liberal antlerless harvest package 1.) (above).

<u>The Restrictive Regulation is:</u> 5-week general season either-sex (HD 421) or brow-tined bull/ antlerless (HD 423) regulation.

The Restrictive Regulation will be recommended if: number of elk observed during post-season aerial surveys is below 400 for 2 consecutive years.

Antlered:

<u>The Standard Regulation is:</u> 5-week general season either-sex (HD 421) or /brow-tined bull/antlerless (HD 423) regulation.

The Standard Regulation will be recommended if: The bull:100 cow ratio observed during post-season aerial surveys is greater than 5 bulls:100 cows.

<u>The Restrictive Regulation is:</u> 5-week general season brow-tined bull/ antlerless regulation in both HDs 421 and 423.

The Restrictive Regulation will be recommended if: The bull:100 cow ratio observed during post-season aerial surveys is at or below 5 bulls:100 cows for 2 consecutive years.

TETON RIVER EMU (Hunting District 450)



Description: This 318-square-mile EMU contains about 40 square miles of elk habitat and 76% of the EMU is private land. Montana Department of Natural Resources and Conservation (DNRC) land is another 17% of the land base. Elk habitat in HD 450 is dominated by the riparian corridor and flat agricultural floodplain of the Teton River upstream from Choteau. Riparian cover and agricultural production (grain and hay) provide nonwinter security and forage. During fall, winter, and early spring these elk utilize upland habitats in this hunting district (HD) and others HD 441 near the Blackleaf Wildlife Management Area (BWMA) and HD 442 near the Ear Mountain WMA (EMWMA).

Public Access: Public access to elk habitats in this hunting district is fair although some key properties are severely restricted. Most access is non-motorized foot traffic from available public roads. Dependent upon daily distribution, about 90% of the elk in this EMU may be unavailable to the general public hunter.

Elk Population: Approximately 100-200 elk are observed (Figure 1) between the BWMA in HD 441 and Deep Creek in HD 442 (north to south across the western edge of HD 450). Most of these elk appear to be resident and, although they use HDs 441 and 442, are not considered to be backcountry elk associated with the upper Teton drainage or the Sun River. However, they are exposed to the harvest prescriptions of HDs 441 and 442 when distributed outside HD 450.

Recreation Provided: During 1999-2001, an annual average of 464 hunter days were provided for an average 92 hunters in this EMU. Most hunting for these elk is day hunting. Due in part to the presence of many white-tailed deer, archery hunting (for elk and deer) is very popular in this district. These elk provide considerable wildlife viewing opportunities during summer because they are near Choteau and often visible from the Teton River road. Although advertised outfitting is limited, there likely are some trespass or gate fees assessed. Because public land is limited relative to the distribution of these elk, most are usually not widely and consistently available to the general hunting public.

Current Annual Elk Harvest: Approximately 10 bull elk and less than 10 antlerless elk are estimated to be harvested annually in HD 450. Some additional harvest of these elk likely occurs in HDs 441 and/or 442. Greater antlerless harvest than currently occurs will be necessary to reduce the population to objective level.

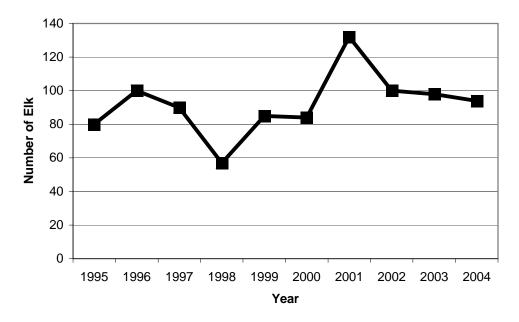


Figure 1. Number of elk counted during post-season aerial trend surveys in the Teton River EMU, 1995-2004.

Accomplishments: FWP has improved communication with some landowners in this EMU and potential solutions to game damage problems are being addressed. Current efforts to abolish the Teton Spring Creek Bird Preserve near Choteau may limit unwanted elk presence that area.

Management Challenges: Dense cover and restricted access to several key properties limits harvest potential. Thus, unwanted population growth of elk is a perennial concern. Along the Teton River, across flat terrain, and close to the community of Choteau, there is always the threat of development of agricultural land for housing.

Population Monitoring: We annually accomplish post-season aerial trend surveys during winter by fixed-wing aircraft to count total numbers of elk. Counts and classifications of bulls are made by a helicopter, which is used in conjunction with surveys to the south.

SUMMARY OF PUBLIC COMMENT

Most comments are from landowners relative to game damage. Most do not want more elk, but do not want fewer elk either. Both landowners and the public are concerned with bull age structure and potential over harvest of bulls. There is public concern about equity of opportunity between general archery hunting and limited general season hunting.

MANAGEMENT GOAL

Within landowner tolerance levels, maintain some presence of elk for public enjoyment. Through use of creative regulations, attempt to provide maximum use of general public hunting to manage elk population level.

HABITAT OBJECTIVES

Maintain quality habitat for elk and preserve/improve soil, water and vegetation quality.

HABITAT MANAGEMENT STRATEGIES

Habitat management is the prerogative of the private landowner (about 76% of the EMU) or public land manager (17% DNRC). FWP will provide technical assistance as requested on elk habitat issues. FWP will also maintain communication with landowners to provide technical assistance on any elk habitat issues that might be addressed by conservation easement programs.

GAME DAMAGE STRATEGIES

Game damage occurs as late spring, summer and early fall use of pastures and agricultural crops. The availability of antlerless permits valid starting 15 August has helped alleviate some late summer/early fall game damage. Use of the A-9/B-12 antlerless elk license valid on private land outside the general season may also reduce game damage.

ACCESS STRATEGIES

Maintain communication with landowners to explore possibilities of increased public hunting access.

POPULATION OBJECTIVES

- 1.) Maintain 75-100 total elk observed during post-season aerial surveys.
- 2.) Maintain 25-35 total bulls observed during post-season aerial surveys, of which not less than 15 are brow-tined bulls.

POPULATION MANAGEMENT STRATEGIES

To develop and/or maintain an appropriate level of antlerless harvest, access to private land will be key. Priority will be given to developing regulation types and season formats that encourage landowners to allow public hunting access.

REGULATION PACKAGES

Six-week either-sex archery regulation [A-9/B-12 licenses (B-tags) also valid if issued], EXCEPT, see Restrictive Regulation for Antlered elk.

Antlerless:

<u>The Standard Regulation is:</u> limited antlerless permits valid before, during and after the general 5-week season (estimated to be about 10 permits when within the population objective range).

The Standard Regulation will be recommended if: the total number of elk observed during post-season aerial surveys is between 75 and 100 elk.

<u>The Liberal Regulation is:</u> limited antlerless permits valid before, during and after general season AND, limited antlerless A-9/B-12 licenses (B-tags).

The Liberal Regulation will be recommended if: the total number of elk observed during post-season aerial surveys is more than 100.

<u>The Restrictive Regulation is:</u> very limited (less than 5) antlerless permits valid before, during and after general season.

The Restrictive Regulation will be recommended if: the total number of elk observed during post-season aerial surveys is less than 75 elk for 2 consecutive years.

Antlered:

<u>The Standard Regulation is</u>: limited either-sex permits (estimated to be about 5 permits when within bull population objective range).

The Standard Regulation will be recommended if: the total number of bulls observed during post-season aerial surveys is more than 25 AND, at least 15 are brow-tined bulls.

<u>The Restrictive Regulation is:</u> 1-2 either-sex permits valid during the archery and general seasons (No general license archery season).

The Restrictive Regulation will be recommended if: the total numbers of bull observed during post-season aerial surveys is less than 25 OR, less than 15 brow-tined bulls are observed for 2 consecutive years.

SWEETGRASS HILLS EMU

(Hunting District 401)



Description: This 1,891-square-mile EMU is located in Toole and Liberty Counties, adjacent to the Canadian border. It is comprised of 90% privately owned lands in and around the Sweetgrass Hills, a series of three small mountainous areas surrounded by native grassland and dryland grain farms. Public lands include Montana Department of Natural Resources and Conservation (DNRC) and USDI-Bureau of Land Management (BLM) administered tracts. BLM lands are mainly at higher elevations, in the rugged terrain of the Sweetgrass Hills.

Elk use of the area is centered on the Sweetgrass Hills, but herds of varying sizes are commonly observed in adjacent agricultural areas. Movements of elk, especially bulls, into and out of Alberta and Saskatchewan have been documented with telemetry data collected in the late 1980s and early 1990s. Migration movements appear to be limited to dispersal of sub-adult animals; herds generally occupy the same ranges yearlong. Elk occupy approximately 60% of this hunting district on a yearlong basis; however, reports and observations of elk have come from every corner of the hunting district over the past 10 years.

This EMU has an occasional mountain lion, but no grizzly bears, black bears, or wolves; coyotes are common. Lack of several predators in this system likely allows for the high rate of elk recruitment observed.

Public Access: A successful Block Management Program was developed in the East Buttes and Gold Buttes areas of the hunting district through the cooperative efforts of local landowners, hunters, and FWP in the mid-1990s. Hunter access is more limited in the West Buttes portion of HD 401, but increasing numbers of elk in recent years have caused landowners in that area to be much more liberal with hunting access. At present, most of the elk in the hunting district are available to the general public. Recreationists, primarily hunters, access the more rugged portion of the hunting district (the Sweetgrass Hills) on foot or horseback. Hunting by use of vehicle/ATV is common on private lands surrounding the Hills. No outfitters that hunt elk operate in this hunting district at present.

Elk Populations: Elk numbers increased during the late 1990s to an observed high of 558 during winter-spring of 2000 (Figure 1). An aerial survey during July 2002 recorded

332 elk. Although elk travel between the West and East Buttes areas, numbers are about the same in the two mountain complexes. Elk are known to move into and out of Alberta and Saskatchewan on a seasonal basis, but cow/calf groups are predictably found on the West and East Buttes. Calf production and recruitment is high in this elk herd, with late winter ratios of 40-60 calves: 100 cows commonly observed over the past 10 years.

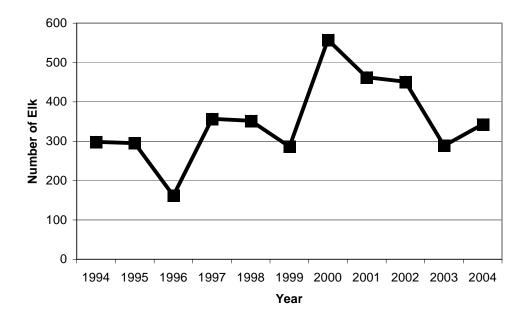


Figure 1. Number of elk counted during post-season aerial trend surveys in the Sweetgrass Hills EMU during 1994-2004.

Recreation Provided: Hunting District 401 is permit-only during the general season, with no outfitting for elk at present. During 1999-2001, elk hunting provided an annual average of 1,767 hunter-days of recreation to an average of 366 hunters.

Hunter harvest and hunter-days have increased recently, due to increased efforts by FWP to reduce elk numbers, particularly in the West Buttes area. Elk hunting recreation will decline to 1990-1995 levels as elk numbers are reduced. Wildlife viewing is also significant in the Sweetgrass Hills due to proximity to the communities of Shelby, Chester and Cut Bank.

Current Annual Elk Harvest: During 1999-2001, an annual average of 29 antlered and 113 antlerless elk were harvested in the EMU. Either-sex archery hunting occurs during the general archery season and archers take 5-8 elk each year.

Accomplishments: Twelve landowners have enrolled approximately 95,000 acres of DNRC and privately owned property in the Block Management Program, mostly in the

Middle Buttes and East Buttes portion of HD 401. Deeded property in the program accounts for 76,400 aces of accessible elk habitat.

Four landowners in the West Buttes area have cooperated in a 4-year effort (1999-2002) to reduce elk numbers through the use of early and late game damage seasons, and increased general hunting season effort.

Management Challenges: Because the area is mostly private land, opinions about elk hunter access and harvest can vary over time, primarily dictated by precipitation patterns, perceived or actual depredation, access issues, and hunting season recommendations. As a result, hunter access to elk can be limited until herds have grown considerably, as happened in the late 1990s and into 2002. Hunter access to the West Buttes area may become increasingly difficult as elk numbers are reduced. This will continue the cycle of fluctuating between high and low elk numbers. Portions of the hunting district with an active Block Management Program have had little or no problem with increasing elk numbers. Generally, however, landowner tolerance for elk tends to keep herds below forage carrying capacity.

Population Monitoring: The trend flight is usually conducted by helicopter in January. During some years, we conduct an additional survey by fixed-wing aircraft in February or March. Total numbers, cows, calves, and bulls are recorded as well as location data with a GPS unit.

SUMMARY OF PUBLIC COMMENT

There has not been any public comment regarding this EMU plan. See Management Challenges section.

MANAGEMENT GOAL

Maintain the number of elk observed during post-season aerial surveys within 20% of 350 and cooperate with private and public land managers in the management of elk habitat to provide a diversity of elk hunting experiences.

HABITAT OBJECTIVES

Continue to develop cooperative land management programs that encourage private and public land managers to maintain and improve a minimum of 75,000 acres of suitable elk habitat

HABITAT MANAGEMENT STRATEGIES

Management activities will include coordination with BLM, DNRC, and private landowners to ensure that grazing, mining and timber harvesting do not degrade important elk habitats. Emphasis will be placed on maintaining high-quality rough fescue

grasslands for forage production and Douglas fir-lodgepole pine stands for escape and thermal cover

GAME DAMAGE STRATEGIES

Game damage occurs during all seasons, including complaints about excessive utilization of native forage and damage to alfalfa, small grains, haystacks, and fences. Two landowners, in particular, in the West Buttes portion of the hunting district contact FWP several times each year about crop damage. Some landowners are more tolerant than others, but elk numbers should be kept below their potential to reduce such complaints.

ACCESS STRATEGIES

Existing Block Management areas will be monitored for hunter and landowner satisfaction, and adjustments made where necessary. Opportunities for additional recreational access through the Block Management program or other similar agreements with landowners will be explored.

POPULATION OBJECTIVES

To keep elk numbers in line with landowner tolerance, that is, to minimize depredation complaints, the observed herd size in this EMU should be kept within a range of 280-420 elk (350 \pm 20%). Counts of bulls in the EMU are particularly difficult due to their movements into and out of Canada, sometimes on a daily or weekly basis, with little predictability. This results in observed bull:100 cow ratios that are probably lower than what actually occurs in the population on a yearlong basis. However, a minimum observed late winter ratio of 15 bulls:100 cows should be maintained.

POPULATION MANAGEMENT STRATEGIES

This EMU has traditionally utilized a limited entry system (permits) to accomplish herd management objectives. More recently, A-7 antlerless licenses have been authorized in addition to antlerless elk permits to help reduce elk numbers. This system has worked well by varying permit levels with observed elk population numbers and working with landowners to improve hunter access during elk population reduction phases. A-9/B-12 elk licenses (B-tags), recently authorized by the Montana legislature, are another tool to harvest antlerless elk, especially when elk populations are over objective.

REGULATION PACKAGES

Six-week either-sex archery regulation EXCEPT, see Restrictive Regulations for Antlerless and Antlered elk.

Antlerless:

The Standard Regulation is: limited antlerless permits (75-125 within objective range).

The Standard Regulation will be recommended if: the number of elk observed during post-season aerial surveys ranges from 280-420.

<u>The Liberal Regulation is:</u> more than 125 general season antlerless permits with additional permits targeted to specific areas prior to and/or after the general season as necessary AND, antlerless A-9/B-12 licenses (B-tags) may be utilized in combination with antlerless permits and/or A-7 licenses.

The Liberal Regulation will be recommended if: the number of elk observed during postseason aerial surveys is more than 420.

<u>The Restrictive Regulation is:</u> less than 50 antlerless permits. There will be no general archery season. Archers will also be required to apply for limited archery-only permits.

The Restrictive Regulation will be recommended if: the number of elk observed during post-season aerial surveys is less than 280.

Antlered:

The Standard Regulation is: 30-50 either-sex permits.

The Standard Regulation will be recommended if: the observed post-season bull:100 cow ratio is at least 15 bulls:100 cows.

<u>The Restrictive Regulation is:</u> less than 30 either-sex permits. There will be no general archery season. Archers will also be required to apply for limited archery-only permits.

The Restrictive Regulation will be recommended if: the observed post-season bull:100 cow ratio less than 15 bulls:100 cows.

GOLDEN TRIANGLE EMU

(Hunting Districts 400, 403, 404, 405, 406, 419, 444 and 471)



Description: This EMU contains 7,964 square miles and essentially consists of land that currently has very few elk and generally encompasses what is known locally as the "Golden Triangle" of wheat production. It is a new EMU since the 1992 Elk Plan. The EMU lies immediately north of Great Falls, east of Highway 89 (Fairfield-Choteau-Dupuyer) and the Blackfeet Indian Reservation and west of the Liberty-Hill County line and the Missouri River. Hunting districts 405, 444 and 471 are outside the described boundary but adjacent to it. Dryland grain production and cattle ranching are the major land uses. Landownership is 87.7% private, 8.4% Montana Department of Natural Resources and Conservation (DNRC) (much in grain production), and less than 2% USDI-Bureau of Land Management (BLM) lands.

Public Access: Good access exists to public lands for deer hunting.

Elk Populations: Elk presence is usually limited to the occasional passage of lone animals or small groups through the area. Limited exceptions to that scenario have occurred. Elk occasionally move out of the Sweetgrass Hills into hunting district (HD) 403. Elk also are occasionally reported/sighted on the western periphery of HD 444 near Augusta. Small groups of elk seasonally occupy the Arrow Creek drainage at the east boundary of HD 471 and a portion of the west boundary of HD 419, but generally occupy more secure habitat in adjacent, limited-entry hunting districts.

Recreation Provided: Due to limited presence, little elk-related recreational opportunity exists. However, the Statewide Harvest Questionnaire reported an annual average 391 hunters during 1999-2001. A general, either-sex archery season currently exists in these districts, providing extremely limited opportunities for hunting, should elk be observed.

Annual Elk Harvest: During 1999-2001, an annual average of 20 antlered and 8 antlerless elk were reported harvested.

Population Monitoring: No population monitoring for elk occurs in this EMU.

SUMMARY OF PUBLIC COMMENT

This is a new EMU and most people realize that because of intensive agriculture, few elk can be tolerated.

MANAGEMENT GOAL

Because more than 90% of the EMU is devoted to agricultural production, the certain damage potential of elk is much greater than any recreational potential that would be provided by permanent elk occupancy. Therefore, our goal is to prevent permanent occupancy by elk in this EMU.

HABITAT OBJECTIVES

None. Permanently suitable or secure habitat does not exist in this EMU.

HABITAT MANAGEMENT STRATEGIES

None.

GAME DAMAGE STATEGIES

Maintain liberal harvest regulations.

ACCESS STRATEGIES

None.

POPULATION OBJECTIVES

Accept the occasional transitory elk in passage across these hunting districts, but tolerate no permanent occupancy by elk.

POPULATION MANAGEMENT STRATEGIES

Recognizing the lack of suitable or secure habitat, management strategies will acknowledge the irregular and unpredictable nature of elk passage and favor the opportunity for a hunter to occasionally sight or kill an elk.

REGULATION PACKAGES

Antlerless and Antlered: Six- week either-sex archery regulation and five-week either-sex general season regulation.

(HD 447)



Description: The main feature of this 748-square-mile EMU is the Highwood Mountains, an island mountain range directly east of Great Falls. This mountain range consists of a block of mountainous national forest land interspersed with, and surrounded by, privately owned rolling foothill-grassland habitats and croplands. There are approximately 317 square miles of elk habitat in the unit, of which 79% are in private ownership. The remaining 21% is primarily USDA-Forest Service (USFS) lands.

Public Access: The national forest in this unit is accessible by two public roads; one that bisects USFS land through the west and south sides and one that serves as an access point to the Forest boundary from the north. The FWP Block Management Program provides one access point to the National Forest from the southeast side. Of the 160,804 acres of elk habitat on private land, approximately 10% is closed to public hunting, 60% has limited public hunting opportunities and the remaining 30% of the private land is open to public hunting.

Elk Populations: The number of elk observed on winter ranges has been relatively stable over the past 10 years (Figure 1). Four-hundred-ninety-six elk were counted during winter 2002-2003, which included 101 elk in the Willow Creek area, 212 elk in the Cottonwood Creek area, 88 elk in the Square Butte area, and 95 elk scattered on the north side of the Highwoods. In 2004, 510 elk were counted.

Recreation Provided: From 1999-2001, the EMU provided approximately 5,457 hunter days for 958 hunters annually. Elk and wildlife viewing occurs along public roads and hiking trails throughout the year.

Annual Elk Harvest: For 1999-2001, the average annual harvest was 151 elk. An average of 46% of the harvest was bulls. Ninety percent of harvested bulls were browtined bulls and 71% of the bulls harvested had at least 6 points on at least one antler.

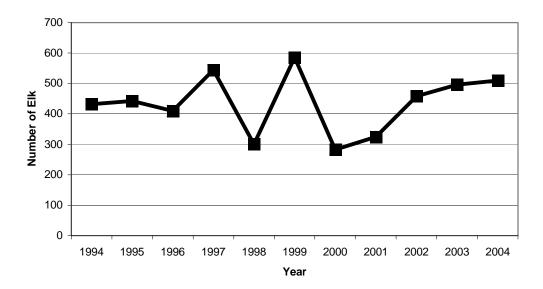


Figure 1. Number of elk counted during post-season aerial trend surveys in the Highwood EMU, 1994-2004.

Accomplishments: This EMU provides one of the most highly coveted either-sex elk permits in FWP administrative Region 4. The total elk population has been very stable for the past ten years.

Management Challenges: Our challenge is to obtain relatively equal harvest distribution of elk throughout the unit. The west and northwest sides of the Highwood Mountains have relatively good access to public land, along with public hunting opportunities on private land. However, because of limited public hunting access to private lands throughout much of the eastern side of the unit, harvest numbers are lower in this area and there is little dispersal of elk from these private "refuges" during hunting season.

Population Monitoring: We survey elk winter ranges 1-2 times annually by fixed-wing aircraft during January-March. During aerial surveys, total numbers of elk, location, and sex and age composition are recorded.

SUMMMARY OF PUBLIC COMMENT

The public, including landowners, were generally supportive of the EMU objectives and plan. A small number of sportsmen were concerned about the potential use of A-9/B-12 licenses and overuse of Block Management Areas.

MANAGEMENT GOALS

Maintain total elk numbers within habitat capabilities and at a level acceptable to landowners and sportsmen. Produce older age class bulls, while maintaining a diverse age structure.

HABITAT OBJECTIVES

Help develop new, and continue current programs such as cooperative grazing systems, timber harvest strategies, travel planning, and possible conservation easements that encourage public and private land managers to maintain and/or enhance suitable elk habitat.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Work with private landowners to increase public access on private lands during hunting seasons to effectively reduce elk security on private lands and to encourage elk use of neighboring public lands.
- Maintain and/or increase elk security on public lands through the use of cooperative travel planning with the USFS.
- Where appropriate, encourage proper use of prescribed fire, timber harvest management, and motorized access to enhance elk habitat on public lands.
- Encourage public land management agencies to protect and enhance elk winter range on public lands by increasing the availability of forage for wintering elk.
- Encourage protection and enhancement of elk winter range on private lands through the establishment of cooperative grazing systems and conservation easements when opportunities arise.

GAME DAMAGE STRATEGIES

There have been no elk game damage complaints during the past three years in this unit. Our goal is to stabilize elk numbers at levels that are acceptable to landowners while providing hunter harvest within historical ranges. Should future game damage situations arise, we will attempt to direct hunting pressure to landowners with depredation complaints.

ACCESS STRATEGIES

FWP will:

- Use the Access Montana Program to work with public and private land managers to increase walk-in public hunting access to public lands.
- Continue to work with private landowners to increase hunter access to private lands where elk currently find security during hunting seasons.

POPULATION OBJECTIVES

- 1.) Maintain the number of elk observed during post-season aerial surveys within 20% of 550 (440-660).
- 2.) Provide a bull harvest comprised of at least 75% brow-tined bulls (BTBs).

POPULATION MANAGEMENT STRATEGIES

The elk population in this unit has been relatively stable during the past ten years. We will maintain the successful management strategy through the use of Special Permits (No General Season).

REGULATION PACKAGES

Six-week either-sex archery regulation, EXCEPT; if the Restrictive Package is adopted for antlerless elk, archery hunting will be limited to bulls only.

Antlerless:

<u>The Standard Regulation is:</u> limited antlerless permits (100-300) AND, limited numbers of A-9/B-12 antlerless licenses (B-tags) may also be recommended.

The Standard Regulation will be recommended if: the number of elk observed during post-season aerial surveys is within the range of 440-660.

<u>The Liberal Regulation is:</u> more than 300 limited antlerless permits (also valid earlier and/or later than the 5-week general season) AND, limited numbers of A-9/B-12 antlerless licenses (B-tags) may also be recommended.

The Liberal Regulation will be recommended if: the number of elk observed during postseason aerial surveys is more than 660.

<u>The Restrictive Regulation is:</u> no antlerless harvest (Archery regulation antlered bull only).

The Restrictive Regulation will be recommended if: the number of elk observed during post-season aerial surveys is less than 440 for 2 consecutive years.

Antlered:

<u>The Standard Regulation is:</u> limited either-sex permits (approximately 75 permits at objective level).

The Standard Regulation will be recommended if: more than 75% of harvested bulls are brow-tined bulls.

The Restrictive Regulation is: reduced either-sex permits (less than 75 permits).

The Restrictive Regulation will be recommended if: less than 75% of harvested bulls are brow-tined bulls for 2 consecutive years.

SNOWY EMU (Hunting Districts 411, 412, 511 and 530)



Description: Elk occupy 25% of this 4,705-square-mile EMU, which includes the Judith Mountains, the North and South Moccasin Mountains, and the Big and Little Snowy Mountains. These isolated mountain ranges in Central Montana form an island of timber surrounded by a large expanse of prairie. The primary land use in this area is ranching, with a limited amount of timber harvest. A large proportion of the occupied elk habitat is comprised of privately owned land, which the majority of elk use year-round. The USDI-Bureau of Land Management (BLM) is the major public land management agency in the Judith and North and South Moccasin Mountains and the USDA-Forest Service (USFS) is the major public land management agency in the Big and Little Snowy Mountains. A sizeable portion of the Big Snowy Mountains is roadless (96,522 acres) with a Wilderness Study Area (87,928 acres) that offers wilderness recreational opportunities.

Public Access: A network of USFS roads in the Little Snowy Mountains provides ample access to public lands. In the Big Snowy Mountains there are 5 legal access points/trailheads, numerous access points where landowners grant access permission, and a trail that traverses the entire south side foothills (the majority of which is on USFS land and open to all-terrain vehicles) providing a fair amount of access to public lands. In the Judith Mountains, a public road bisects the range and another public road runs along the top of the range, north for half its length, which provides a fair amount of access to the larger blocks of BLM and Montana Department of Natural Resources and Conservation (DNRC) lands. Access to public lands (BLM and DNRC) in the North and South Moccasin Mountains is largely via permission from private landowners.

The major portion of elk habitat in the Snowy EMU is on private lands, and year-round, the majority of elk are distributed on private lands. At least 85% of elk harvest occurs on private lands. During the hunting season (archery and rifle), at least 80% of the elk in the Snowy EMU occur on 2 large ranches in the Little Snowy Mountains, 1 large ranch on the west end of the Big Snowy Mountains, and 3 large ranches on the northeast end of the Judith Mountains. Access to these ranches is very restricted. The ranches that are located peripheral to these large ranches provide most of the hunter access. The access situation in the Snowy EMU has remained relatively stable over the past 10 years.

Elk Populations: The observed elk populations (2002-2003 winter aerial surveys) in the Snowy EMU were as follows: Big Snowy Mountains - 473; Little Snowy Mountains - 874; Judith Mountains (including the North and South Moccasin Mountains) - 360. Observed numbers of elk have steadily increased and have almost doubled in the past 10 years (Figures 1 and 2). The most significant increases in elk numbers have occurred in the Big and Little Snowy Mountains.

Recreation Provided: During 1999-2001, this EMU provided an annual average of 5,770 days of hunting recreation for 947 hunters. Most of the recreation this elk population provides is hunting-related, with archery hunting comprising about one-half of the hunter days. Wildlife viewing is popular with summer hikers and campers in the Judith and Big and Little Snowy Mountains.

Annual Elk Harvest: During 1999–2001, an annual average of 122 antlerless elk and 101 antlered elk were harvested in the EMU. At least 75% of the harvested bulls were brow-tined bulls. Between 40 and 50 percent of the antlered elk harvest was by archers. At least 85% of the elk that are harvested are taken on private lands. Over the past 10 years the number of elk permits issued, season length, and total elk harvested have increased with the increasing elk population.

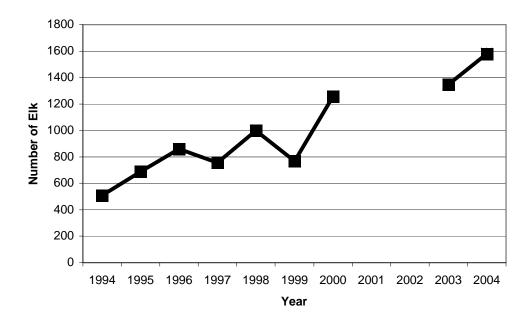


Figure 1. Number of elk counted during post-season aerial trend surveys, HD 411 and HD 530, 1994-2004.

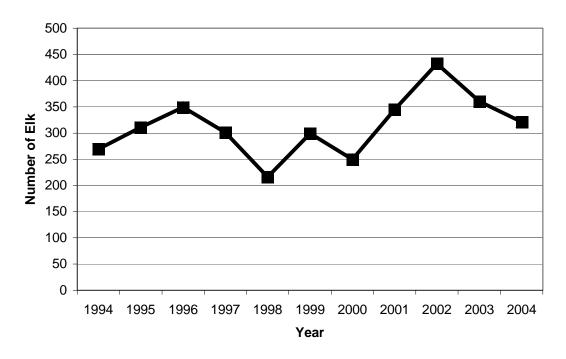


Figure 2. Number of elk counted during post-season aerial trend surveys, HD 412, 1994-2004.

Accomplishments: Over the past decade, numerous adjustments have been made to the hunting of elk in this EMU – all attempts to stabilize the population. The Big and Little Snowy Mountains elk population used to be managed as 2 separate areas. Hunting access was difficult in both areas and limited access discouraged hunters. Their efforts to gain access to additional elk hunting areas/properties were minimal. To rectify this, all permits issued for HDs 411, 511 and 530 were made valid for the entire area and elk population. This increased hunter effort and many hunters developed a rapport with additional landowners and access was improved.

In 1999, the east boundary of HD 411 was extended further east to include elk habitat in the Yellow Water Triangle (located southeast of Grass Range). Elk commonly crossed back and forth across Highway 87, the boundary between 2 different hunting districts, making permits less effective. The east boundary of HD 412 was also extended further east the same year to include elk habitat just across that hunting district border. Improved access and elk harvest resulted from the expansions of hunting districts boundaries in both HDs 411 and 412.

Another strategy implemented in the Big and Little Snowy Mountains was making antlerless elk permits valid prior to the opening of the general rifle season. This change enabled rifle hunters to access elk attracted to the smaller ranches (primarily alfalfa hay fields) that are adjacent to the larger ranches that are restrictive and harbor elk during the general hunting season. Initially, antlerless permits became valid the day after archery season closed. This concept was expanded in 2000 when 50 of the 225 antlerless elk permits were made valid on private land starting 1 October. This allows more effective harvest because landowners can allow antlerless elk rifle hunters on their properties when the elk were still present.

In 2000, we also extended the time period for which the antlerless elk permits were valid in the Big and Little Snowy Mountains to 15 December. This allowed hunters additional opportunities when elk left the ranches where access was restricted after the general season closed. This concept was expanded to the Judith and North and South Moccasin Mountains in 2002. The time period was extended again, to 30 December in the Big and Little Snowy Mountains in 2003.

Management Challenges: The most important management challenge is to develop and implement strategies that will effectively increase the geographical distribution of elk within the Snowy EMU. Having elk widely distributed throughout the EMU would greatly facilitate meeting the management goal and harvest and population objectives.

Such strategies include significant increases in hunter access to the large ranches that are currently very restrictive to public hunting and thus harbor most of the elk, particularly during the archery and rifle elk hunting seasons. Unfortunately, current programs have been largely ineffective. For example, the Block Management program could improve access to these large ranches if those landowners felt a need to reduce elk numbers (for their, or their neighbors, agricultural operations), or wanted assistance in managing hunters, or wanted to provide public hunting opportunities. Most large ranch owners in this EMU, however, don't seem to desire a reduced number of elk.

Because the Snowy EMU has trophy bull elk that any archery hunter can pursue with a general elk license, archery hunters and outfitters of archery hunters lease many of the better elk hunting properties. This results in restricted access for other archery and rifle elk hunters. Leasing of ranches for archery elk hunting has not contributed to solving elk management problems.

Suitable elk habitat is currently available on public lands within the Snowy EMU. However, at current hunter numbers and access levels, increasing the quantity and/or quality of elk habitat on public lands is necessary if elk are to be drawn off the large privately owned ranches to public lands. Should ample public access became available on these large restricted ranches, increasing the quantity and or quality of elk habitat on public lands would also help hold elk on the public lands within the Snowy EMU.

Population Monitoring: We annually accomplish post-season aerial trend surveys by use of fixed-wing aircraft during winter. Survey timing is coordinated for HDs 411 and 530. We record total number of elk and number of bulls observed and record locations with GPS units.

SUMMARY OF PUBLIC COMMENT

Public comment has fallen into 2 major categories: those that want more elk, or no reduction in the number of elk or number of mature bulls and or those that want significantly fewer elk. The former group is largely comprised of archers. The majority of landowners strongly support having fewer elk in this EMU.

MANAGEMENT GOAL

Perpetuate viable elk populations and elk habitats; provide hunter opportunity for harvesting older bulls; and maintain population levels within the constraints of landowner tolerance (1,100 elk).

HABITAT OBJECTIVES

- 1. Develop cooperative programs with public land managers to maintain productive elk habitat on public lands.
- 2. Develop cooperative programs with public land managers to maintain elk security on public lands so that at least 50% of the elk harvest occurs on public lands.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Identify tracts of public land where habitat manipulations have the potential to attract elk and shift elk distribution to public land throughout the year, including during the hunting seasons.
- Where appropriate, encourage the use of prescribed fire and timber harvest management to enhance elk habitat on public lands, while insuring that the same habitat prescriptions do not cause a reduction in elk security on public lands.
- Encourage increased elk security on public lands through the use of seasonal road closures, and by working to prevent the establishment of new roads on public lands.
- Work with private landowners to increase public access to private lands during hunting seasons.
- Encourage public land management agencies to protect and enhance elk winter range on public lands. This includes increasing the availability of forage for wintering elk on public lands to reduce elk depredations on private lands.
- Protect and enhance elk winter range on private lands through the establishment of cooperative grazing systems and conservation easements when opportunities arise.

GAME DAMAGE STATEGIES

FWP will:

- Maintain elk populations at levels that are not detrimental to the majority of landowners.
- Direct hunting pressure to landowners with elk depredation problems.
- Implement more liberal season types in areas with the greatest depredation problems.

ACCESS STRATEGIES

The key to managing elk populations in this EMU is to increase public hunting access to private lands. Currently, access to some of the larger ranches is very limited.

FWP will:

- Increase efforts to inform landowners of the population status of elk in this EMU and the negative impacts the current number of elk are having on other private land agricultural operations.
- Work with public and private land managers to increase walk-in public hunting access to public lands, using the Access Montana Program where appropriate.
- Work with private landowners to increase hunting access to private lands where elk currently find refuge during hunting seasons.

POPULATION OBJECTIVES

The objective for numbers of elk observed during post-season aerial surveys was derived based on a landowner tolerance level and the amount of forage available during winter. When the elk forage capacity of the larger ranches that harbor elk and significantly limit public hunting is exceeded, elk depredate on neighboring private land agricultural crops. When total elk numbers exceed 400 in the Big Snowy Mountains, 400 in the Little Snowy Mountains, and 300 in the Judith Mountains, such depredations increase and landowner tolerance is exceeded.

1. Maintain the number of elk observed during post-season aerial trend surveys within 20% of 1,100 elk (880-1,320). The EMU objective of 1,100 observed elk is the combination of the following desired distribution of observed wintering elk:

Big Snowy Mountains (West half HD 411 and HD 511) – 400 elk Little Snowy Mountains (East half HD 411 and HD 530) – 400 elk Judith and North and South Moccasin Mountains (HD 412) – 300 elk

2. Maintain a minimum of 165 bulls observed in the post-season aerial surveys comprised of at least 50% brow-tined bulls. The EMU objective of 165 observed bull elk is the combination of the following desired distribution of observed wintering bull elk:

Big Snowy Mountains (West half HD 411 and HD 511) – 60 bulls Little Snowy Mountains (East half HD 411 and HD 530) – 60 bulls Judith and N. and S. Moccasin Mountains (HD 412) – 45 bulls

POPULATION MANAGEMENT STRATEGIES

Regulation changes will be recommended when numbers of elk observed on post-season aerial surveys are more than 20% above (1,320) or below (880) the objective level (1,100 elk).

• One strategy for harvesting elk in the Snowy EMU is to have elk rifle seasons that are open before and after the 5-week season. During spring, summer and early fall elk are more widely scattered. Thus, early rifle permits are more effective before the vast majority of elk move on to the large refuge ranches. Following the 5-week general season, elk sometimes leave the larger refuge ranches, dependent on weather and forage availability. During this post-season period, rifle permits are again effective.

- Another strategy for harvesting elk is to provide a general antlerless season. This will provide landowners and their families and friends the opportunity to hunt antlerless elk if they do not draw an either-sex (bull) elk permit. This could increase the antlerless elk harvest on ranches that are located peripheral to the large ranches that provide refuge to elk.
- Another strategy is to make available to archery and rifle elk hunters an additional antlerless elk license. Such (A-9/B-12) elk licenses would allow archery hunters who have access to good elk hunting areas the opportunity to kill an antlerless elk while he or she continues hunting for a bull. An additional antlerless elk license would also provide landowner's families and friends the opportunity to kill an extra antlerless elk.

REGULATION PACKAGES

Six-week either-sex archery regulation, EXCEPT, see Restrictive Regulations for Antlerless and Antlered elk.

Antlerless:

<u>The Standard Regulation is:</u> limited antlerless permits, some or all of which may be valid prior to the beginning and beyond the end of the general season.

The Standard Regulation will be recommended if: numbers of elk observed on post-season aerial surveys are within 20% (880-1,320) of the EMU objective (1,100). Individual herd objectives are: 640-960 elk in Big and Little Snowy Mountains (HDs 411, 511, and 530) and 240-360 elk in Judith and North and South Moccasin Mountains (HD 412).

<u>The Liberal Regulation is:</u> general antlerless regulation for a portion of (or the entire) 5-week general season AND, antlerless permits valid prior to the beginning and beyond the end of the general 5-week season and/or antlerless A-9/B-12 licenses (B-tags) may be recommended for the general 5-week season and 6-week archery season.

The Liberal Regulation will be recommended if: numbers of elk observed on post-season aerial surveys are more than 20% above (1,320) the EMU objective (1,100). Individual herd triggers are: more than 960 elk in Big and Little Snowy Mountains (HDs 411, 511, and 530) or more than 360 elk in Judith and North and South Moccasin Mountains (HD 412).

<u>The Restrictive Regulation is:</u> limited antlerless permits (zero if necessary) AND, no antlerless elk hunting on the general elk license during the archery season.

The Restrictive Regulation will be recommended if: numbers of elk observed on post-season aerial surveys are more than 20% below (880) the EMU objective (1,100) or, less than 640 elk in Big and Little Snowy Mountains (HDs 411, 511, and 530) or less than 240 elk in Judith and North and South Moccasin Mountains (HD 412).

Antlered:

<u>The Standard Regulation is:</u> limited either-sex permits issued at levels sufficient to maintain bull numbers above the minimum late winter bull herd objective 165 bulls within the EMU. During the past 5 years issuing 95 either-sex permits has maintained late winter bull numbers between 195 and 358. If bulls contribute to severe crop damage their numbers may be lowered to the minimum bull objective by increasing either-sex permit levels.

The Standard Regulation will be recommended if: numbers of bulls observed during post-season aerial surveys are above the minimum late winter objective of 165 bulls, with at least 50% (83) brow-tined bulls. Individual herd objectives are: 120 bulls (60 BTB) in the Big and Little Snowy Mountains (HDs 411, 511, and 530) and 45 bulls (23 BTB) in the Judith and North and South Moccasin Mountains (HD 412).

<u>The Restrictive Regulation is:</u> limited either-sex permits (zero if necessary) AND, no antlered elk hunting on the general elk license during the archery season.

The Restrictive Regulation will be recommended if: numbers of bulls observed during post-season aerial surveys are less than 120 bulls (60 BTB) in the Big and Little Snowy Mountains (HDs 411, 511, and 530) or, less than 45 bulls (23 BTB) in the Judith and North and South Moccasin Mountains.