

NEVADA DEPARTMENT OF WILDLIFE

HARVEST MANAGEMENT GUIDELINES FOR HUNTING SEASONS

Revised Draft 2

Draft September 21, 2016

Deleted: August 12

Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 2 of 20

TABLE OF CONTENTS

Schedule for formulating harvest management guidelines 3

Objective 4

Harvest management guideline approaches 4

Big game 6

Pronghorn antelope 6

Black bear 8

Bighorn sheep 8

Elk 9

Mountain goats 14

Mountain lion 14

Mule deer 15

Small game and fur-bearers 18

Greater sage-grouse 18

Wild turkey 19

Other small game 19

Fur-bearers 19

Bobcat 20

Revised Draft

|

September 21, 2016

Deleted: August 12, 2016

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 3 of 20*

SCHEDULE FOR FORMULATING HARVEST MANAGEMENT GUIDELINES

Estimated Date	Harvest Guidelines Schedule	Responsibility
August 8, 2015	Introduce Harvest Management Guidelines to Commission	Game Division
September 25, 2015	Gather existing guidelines into a single document	Game Division
October 9, 2015	Gather comparative data from neighboring states	Game Division
October 16, 2015	Provide draft guidelines generally followed where none exist	Game Division
November 2–6, 2015	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Game Division
November 14, 2015	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
December 5, 2015	Develop revision of harvest management guidelines based on biological data and public opinion	Guidelines Team
January 15, 2016	Second review draft to guidelines committee	Game Division
January 22, 2016	Second review draft to agency	Game Division
January 29, 2016	Draft public survey instrument to seek input on specific questions that may develop	Guidelines Team
April 8, 2016	Summarize feedback from public survey	Guidelines Team
August 13, 2016	Provide Commission with informational update on status of harvest management guidelines	Commission
August 24–26, September 6–7, 2016	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Guidelines Team
September 23–24, 2016	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
October 30, 2016	Final revision to harvest management guidelines	Guidelines Team
November 18–19, 2016	Present to Commission for adoption	Commission

Deleted: August 12, 2016

September 21, 2016

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 4 of 20*

OBJECTIVE

Harvest management guidelines are designed to be used by Nevada Department of Wildlife (Department) Game Biologists when formulating hunt recommendations. Harvest management guidelines are intended to provide general guidance on the parameters for which hunted or trapped species are managed. Like hunt recommendations, harvest management guidelines are shared with the Nevada Board of Wildlife Commissioners (Commission) and County Advisory Boards to Manage Wildlife (CABs) before approval in public session following a regular review cycle described in the preceding pages.

The harvest management guidelines themselves are one piece of an overall planning approach used by the Commission and Department in managing wildlife. While harvest management guidelines describe the objectives to which the Department manages, other protocols describe how that data is collected. Management plans (e.g., species management plans and related sub-planning documents) describe landscape level objectives, opportunities for habitat enhancement, specific herd management objectives (e.g., increase population), and management challenges (e.g., persistent low fawn recruitment for pronghorn).

The Department also operates under a Commission-approved strategic plan that provides agency vision, an annual work plan developed under the Wildlife and Sport Fish Restoration (WSFR) Program, annual or biennial translocation plans approved by the Commission, and an annual implementation plan that ties together budgets, specific tasks, and work units for the upcoming year.

The Department manages Nevada's wildlife within the biological limits of each species. Management strategies are developed to address social perceptions, which are routinely more conservative than the limits at which wildlife may be biologically managed.

Ultimately, the Department manages wildlife in the public trust for all of Nevada's citizens. All game animals, from predators to big game, are managed as part of an important ecosystem to be sustained for future generations of Nevadans and our visitors to enjoy. These harvest management guidelines have been developed to meet a variety of hunting desires and strive to provide adequate opportunity for all, while maintaining a self-sustaining resource. The guidelines are based on the best available biological and social science. Nevada has a diverse wildlife resource, yet many of these resources are limited in supply. The following guidelines attempt to provide the diversity of experiences desired by the hunters of Nevada, while providing the necessary management so that everyone will benefit from diverse wildlife populations in the future.

HARVEST MANAGEMENT GUIDELINE APPROACHES

The Department and Commission will revisit the guideline package with the public every 4 years. The 4-year harvest guideline framework aligns with the following approaches:

- Obtain input from the Commission on hunt guideline concerns that were brought to their attention; use this input to guide public survey questions.
- Use CABs and public outreach avenues to ensure inclusion of affected and interested customers in guideline and hunt recommendation development.
- Commission Policy 24 provides direction to the Department in allocating quotas among weapon classes and between resident and nonresident hunters.
- Seasons are recommended biennially, with recommendations from the Department of Wildlife to CABs and the Nevada Board of Wildlife Commissioners.
- Maintain consistent wildlife survey protocol and interpretation to develop hunt recommendations across the state in accordance with other pertinent management plans (e.g., species management plans and annual work plans). Population management objectives (including male to female ratios, harvest rate, or other

Deleted: formulating

Deleted: hunting seasons and tag quotas

Deleted: August 12, 2016

September 21, 2016

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 5 of 20*

parameters by which we manage populations) for specific units may be described within these pertinent species management plans.

- Provide hunt structures across the state consistent with Commission policy and statewide species plans. Simplify hunt regulations and restrictions related to the hunt structure. Standardized and simplified hunt structures should not obstruct diversity of hunting opportunities.
- Provide for a diversity of hunter opportunity while maintaining wildlife population health. Guidelines for this approach are:
 - Limit hunting seasons when the legal animals are most vulnerable (e.g., breeding period) except to provide alternative or late hunting seasons in some management areas.
 - Allocate hunt tag quotas with respect to weapon type demand per Commission Policy 24.
 - Use innovative management hunts to address specific management objectives that are not being achieved through standard hunt structures.
 - Use split hunt structure to reduce user conflicts and hunter densities.
 - Use targeted harvest by hunters to address human-wildlife conflicts when appropriate.
 - Reserve about 10% hunting tag quotas for nonresident hunters in limited entry hunts.
- Emphasize youth and new big game hunter opportunities when possible. In doing so, provide diverse and dispersed hunt opportunities to allow equitable tag availability and limited conflict with other uses.
- Emphasize small game, predator-furbearer, and other wildlife hunt opportunities. Guidelines for this approach are:
 - Liberalize bag and possession limits as well as season lengths within sustainable biological means to encourage hunter participation.
 - Maintain consistent season opener and structure to reduce hunter confusion among years.
- Several specialty hunts are offered each year consistent with appropriate statute and rule, to include Silver State tags, Dream tags, and Partnership in Wildlife tags. These are important programs that have relatively little influence on harvest management for remainder of Nevada's wildlife. Their implementation is acknowledged but not described within these guidelines.

Deleted: August 12, 2016

September 21, 2016

Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 6 of 20

BIG GAME

BIOLOGICAL FRAMEWORK

The Department conducts annual or biennial surveys to determine composition (i.e., sex and age) of ungulate populations. Data collected during those surveys are subsequently incorporated into deterministic population models to derive population estimates. These population estimates are used by the Department to assess male to female ratios, recruitment, population trends, and ultimately provide the starting point for determining the amount of harvestable surplus available from each population.

Harvest is an important tool for managing populations of wild ungulates. Although male to female ratios in wild ungulates bear little effect on population productivity, it is a substantial consideration for the Department when assessing tag quotas. Indeed, ratios in wild ungulates can vary from 10–50 males per 100 females without a noticeable effect on juvenile recruitment. The variation in male to female ratios can, however, have a noticeable effect on hunter satisfaction, hunt quality, and harvest success. Managing populations toward the lower end of the male to female ratio would allow more hunters to participate in a hunt (i.e., chance to draw a tag more frequently) and result in a fewer older age class males in the ungulate population, whereas managing at the upper end of the ratio provides fewer hunters with the ability to participate in a hunt (i.e., chance to draw a tag every 3–4 years) while yielding higher hunt success for those that draw a tag with an older age structure in the ungulate population. The Department has set management objectives at the mid-to-upper point of the biologically sustainable male to female ratio for all wild ungulates. The Department may recommend a quota reduction when the recorded male to female ratio is below objectives and may recommend a quota increase when the recorded male to female ratio is above objectives.

In contrast to male to female ratios, the juvenile to female ratio directly influences population productivity. The Department assesses current and historical juvenile to female ratios to determine population trends because of its correlation with recruitment of new individuals into the breeding population. In general, a ratio above 30–40 juveniles per 100 females suggests a stable or increasing population, while a ratio below 30–40 juveniles per 100 females suggests a declining population and is characteristic of a population at or near carrying capacity. In most cases, the Department manages for stable or increasing populations and may recommend an increase in the quota if the juvenile to female ratio is above the sustainability threshold. When the juvenile to female ratio is low, the Department may recommend a decrease in the male quota and the inclusion of a female hunt or an increase in the female quota.

PRONGHORN ANTELOPE

The Department's Pronghorn Antelope Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

Current harvest objectives for pronghorn antelope are set forth in the Department's pronghorn antelope management plan: *Nevada's Pronghorn Antelope, Ecology, Management, And Conservation (2003)* and subsequent Commission action: *Nevada Board of Wildlife Commissioners Policy for the Management of Pronghorn Antelope (2003)*.

Season prescriptions:

1. Pronghorn antelope hunts may be authorized for either "horns-longer-than-ears" (buck) or "horns-shorter-than-ears" (doe).
2. Hunts for horns-longer-than-ears pronghorn antelope involve the following weapon classes: "any legal weapon" and "archery" seasons. These seasons generally occur on standard opening dates within the state. In limited cases, seasons are split to reduce hunter densities or more effectively target harvest timing.
3. Where they occur, standard hunts for horns-shorter-than-ears pronghorn antelope are limited to "any legal weapon" seasons.

~~September 21, 2016~~

Deleted: ,

Deleted: "muzzleloader,"

Deleted: August 12, 2016

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 7 of 20

Horns-longer-than-ears archery	
Standard Season	August 1- August 21
Horns-longer-than-ears any legal weapon	
Standard Season	August 22-September 7
Late Season	September 25-October 4
Non-standard Split Season (Unit 033)	August 22-28 and August 29-September 7
Non-standard Season (202, 204)	October 15-30
Horns-shorter-than-ears any legal weapon	
Standard Season	September 8-20

- Deleted: September
- Deleted: 17
- Deleted: Horns-longer-than-ears muzzleloader (...)
- Formatted Table
- Deleted: 6

Harvest management and tag quota prescriptions:

- A. Annual composition survey data are used in computer population models to assist Game Biologists in estimating the pre-hunt adult population size. A representative sample of each herd is observed through aerial or ground surveys to determine age (young to adult) and sex (male to female) ratios. These pre-hunt adult population estimates and male to female ratios used are for determining quotas targeting desired post-hunt buck to doe ratio objectives, demand by weapon class, and hunter success rates.

Harvest levels for horns-longer-than-ears (buck) pronghorn are based on a desired post-season buck ratio objective of 20-30 adult (≥2 year old) bucks per 100 does. The target buck to doe ratio is based on adult bucks because many yearling bucks have horns lengths that would make them unlawful for harvest.

Standard units	
Buck to doe ratio objective (post-season)	25 bucks to 100 does
Applicable hunt units	All open units

- B. Harvest levels for horns-shorter-than-ears pronghorn are determined on a hunt unit basis to allow for herd population management and to provide additional and desired hunting opportunities to harvest pronghorn does. Doe harvest criteria are based on specific criteria to the individual herd.

Doe harvest is typically managed within the range of 0-20% of the total adult doe population. Harvest rates may fall outside this range in the case of catastrophic environmental events or other unique situations.

Pre-hunt adult doe estimate	Pre-hunt buck ratio estimate	Observed fawn ratio	Desired harvest rate
0-300	>30	3-year stable or increasing	0-10%
300-500	>30	3-year stable or increasing	0-20%
>500	>30	3-year stable or increasing	5-20%

In some instances, fawn to doe ratios may decline when the population approaches the capacity of the habitat, and in those instances doe harvest may be needed to maintain healthy populations.

Deleted: August 12, 2016

~~September 21, 2016~~

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 8 of 20*

Private land issues

Issues involving private land depredation are managed in accordance with NAC 502.424. Emergency depredation hunts may be employed.

BLACK BEAR

The Department's Bear Management Goal is to manage black bear population numbers and distribution as an important part of Nevada's fauna, while providing hunting and other related recreational opportunities. The hunt recommendation goal is to allow bear hunting harvest, while managing for representation of older age cohorts of both sexes in the population.

Season prescriptions:

1. Black bear hunts may be authorized for "either sex" seasons, except that cubs or a sow accompanied by cubs may not be taken.
2. Hunts for either sex black bear "any legal weapon" seasons will occur on standard opening dates.

Any legal weapon seasons may begin on September 15 and run through December 31

Harvest management and tag quota prescriptions:

- A. Game Biologists will manage black bear harvest toward moderate harvest, while considering modeled population trends.
- B. Tags and harvest limits may be adjusted to maintain light or moderate harvests. The most recent 3-year mean or trend should receive greater emphasis when determining permit levels; emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Parameter	Light harvest	Moderate harvest	Heavy harvest
Percent females in harvest	<30%	30–40%	>40%
Percent adult females within female harvest	>55%	45–55%	<45%
Mean age of harvested males	>4 years	2–4 years	<2 years

BIGHORN SHEEP

As stated in the statewide Bighorn Sheep Management Plan, the Department's goals are to restore and maintain bighorn sheep herds at optimal population levels, provide diverse recreational opportunities, recognize hunting is a legitimate and desirable use of the bighorn sheep resource, strongly advocate habitats be maintained in good ecological condition, and reduce and manage risk of disease transmission.

Season prescriptions:

1. Units will be the primary geographic basis for managing bighorn harvest. Units may be subdivided to more optimally spread hunting pressure and harvest to all known areas of bighorn distribution during the hunting season.

Deleted: August 12, 2016

September 21, 2016

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 9 of 20

- 2. All hunts are "any legal weapon" seasons.
- 3. Bighorn sheep season will run according to the following table. Split or extended seasons may be implemented if hunter crowding and hunt efficacy becomes an issue. Standard season length will not be less than 21 days. Hunt on Department of Defense lands have special regulations and restrictions and seasons may need to be adjusted according to their schedules.

Deleted: Standard California and Rocky Mountain bighorn ram seasons will run September 1 through October 30, whereas most desert (Nelson) bighorn sheep seasons will run November 20 through December 20.

Deleted: For hunts involving Department of Defense lands, the north range season will start on the Saturday closest to Nov 20 and run for 23 days, and the south range season will begin on the third Saturday in December and run for 16 days.

<u>Any Legal Weapon – Desert Bighorn (Nelson) Sheep Ram</u>		
		<u>Dates</u>
<u>Standard Seasons</u>		<u>November 20–December 20</u>

<u>Non-standard Seasons</u>		<u>Dates</u>
<u>161 Early; 184; 202, 204</u>		<u>October 15–November 5</u>
<u>212 Early</u>		<u>November 15–December 5</u>
<u>212 Late</u>		<u>December 6–December 26</u>
<u>252</u>		<u>Saturday closest to November 20, running for 23 days</u>
<u>280; 281; 282</u>		<u>Third Saturday in December, running for 16 days</u>

<u>Any Legal Weapon – Desert Bighorn (Nelson) Sheep Ewe</u>		
<u>Standard Seasons</u>		<u>Dates</u>
		<u>October 5–25</u>

<u>Any Legal Weapon – California Bighorn Sheep Ram</u>		
		<u>Dates</u>
<u>Standard Seasons</u>		<u>September 1–October 30</u>

<u>Any Legal Weapon – California Bighorn Sheep Ewe</u>		
<u>Standard Seasons</u>		<u>Dates</u>
		<u>November 6–30</u>

<u>Any Legal Weapon – Rocky Mountain Bighorn Sheep Ram</u>		
<u>Management Areas</u>		<u>Dates</u>
<u>114 Early</u>		<u>September 1–October 30</u>
<u>114 Late; 115</u>		<u>December 20–February 20</u>

- 4. Bighorn ewe seasons will be no shorter than 21 days and will occur on dates that do not overlap with bighorn ram seasons in same unit. Other considerations are to reduce overlap with mule deer rifle seasons in same unit and to accommodate optimal timing of bighorn sheep captures for management and disease surveillance.

Harvest management and target quota prescriptions:

- A. Ram tag numbers will recommended at 8% of total estimated rams, not to exceed 50% of the estimated Class III and IV rams (i.e., rams ≥6 years of age) derived from a reconstructive deterministic population model for each herd based on aerial survey data (primarily recruitment), best available survival rates, and estimated

Deleted: August 12, 2016

September 21, 2016

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 10 of 20

ingress-egress These criteria are expected to obtain a 3-year average age of harvested rams of 6 years or older within each unit.

- B. Criteria for establishing ewe hunts and tag numbers will be based on maintaining herd size at or below established population objectives for herds of concern with seasonal or yearlong habitat resource limitations, past cyclical declines associated with record high population size, or proximity to known disease risk. Opportunities for removal of source stock animals for low risk translocations will be considered prior to recommending ewe harvest.

Deleted: sustainable management levels (SML)

Deleted: SML

ELK

The Department's Elk Management Goal is to maintain elk populations to meet population objectives, while providing recreational opportunities and avoiding adverse impacts to the species, its habitat, and reducing land use conflicts. The Commission has adopted various local sub-plans, which provide broad and specific management goals for elk in Nevada and identify additional objectives specific to those areas.

Harvest objectives for elk are set forth in the Department's *Nevada Elk Species Management Plan (1997)* and 10 subordinate sub-plans: *Bruneau River Watershed Environmental Analysis (1994)*; *Wells Resource Management Plan, Elk Amendment and Decision Record (1995)*; *Environmental Assessment for the Release of Elk into the Jarbidge Mountains, Nevada (1997)*; *NDOW Decision For Lands Outside of Wells RMP Elk Amendment Subplan; Central Nevada Elk Plan (2004)*; *Conservation Agreement for the Spring Mountain National Recreation Area (1998)*; *the White Pine County Elk Plan (1999)*; *Lincoln County Elk Management Plan (2003)*; *the Western Elko County Elk Management Plan (2003)*, and *the Humboldt County Elk Management Sub-Plan (2016)*.

Season prescriptions:

Because of high population growth rates observed in most elk herds and conservative population objectives identified in elk sub-plans, the need to increase harvest on elk to reduce both population size and growth rates has required aggressive hunt structures to maximize the harvest of antlerless elk. These aggressive season structures and quotas are designed to meet the population objectives and minimize conflicts with other hunts. Standardized season dates are implemented when practical. Population objectives identified in local sub-plans, however, may supersede the implementation of a standardized season. Elk hunts are currently authorized for "antlered elk" (i.e., bull), "spike-only elk," or "antlerless elk" (i.e., cow).

- 1. Antlered elk hunts, which consist of "any legal weapon," "muzzleloader," and "archery" seasons, may have varied dates among units to reduce overlap with concurrent hunt seasons for other species. In some units a multiple any-legal-weapon split-season (i.e., early-late) structure has been employed to reduce hunter densities, increase hunt quality, and more effectively achieve desired harvest objectives.

Archery – Antlered Elk		
Standard Seasons		
061, 071; 062, 064, 066–068; 072, 073, 074; 075; 076, 077, 079, 081		August 16–31
111–115; 104, 108, 121; 108, 131, 132; 161–164, 171–173; 221–223; 231; 262		August 25–September 16
Non-standard Seasons		
078, 105–107, 109		September 1–20

Deleted: August 12, 2016

September 21, 2016

Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 11 of 20

Muzzleloader – Antlered Elk		
<u>Standard Seasons</u>		Dates
061, 071; 062, 064, 066–068; 072, 073, 074; 075; 076, 077, 079, 081		September 1–16
111–115; 104, 108, 121; 108, 131, 132; 161–164, 171–173; 221–223; 231; 241, 242; 262		October 22–November 5

Deleted: Management
Deleted: Areas
Deleted: 6, 7, 12, and 13
Deleted: 11, 16, 17, 22, 23, 24, and 26

<u>Non-standard Seasons</u>		Dates
078, 105–107, and 109		October 5–21

Deleted: Unit Group

Any Legal Weapon – Antlered Elk		
<u>Standard Seasons</u>		Dates
061, 071; 062, 064, 066–068; 072, 073, 074; 075; 076, 077, 079, 081	Early	October 22–November 5
	Late	November 6–20

Deleted: Management Areas
Deleted: 6, 7, 12, and 13
Deleted: .

<u>Standard Seasons</u>		Dates
111–115; 104, 108, 121; 131, 132; 161–164, 171–173; 221–223; 231; 241, 242; 262	Early	November 6–20
111–115; 161–164, 171–173; 221–223; 231	Late	November 21–December 4

Deleted: ¶
Nov. 20
Deleted: Management Areas
Deleted: 11, 16
Deleted: .
Deleted: , 23, 24, and 26

Any Legal Weapon – Antlered Elk		
<u>Non-standard Seasons</u>		Dates
078, 105–107, and 109	Early	October 22–November 5
	Late	November 6–28
051; 065; 241, 242		September 17–30
091		Beginning second Saturday in September and running for 3 weeks

Deleted: Unit Group
Deleted: and

- Spike Elk Hunts are established in identified hunt units to reduce the hunting pressure and harvest of mature bulls, while still managing population and harvest objectives. Spike elk hunts will run concurrent with Antlerless Elk seasons since the majority of spike elk occur in cow-calf elk groups.
- Hunts for antlerless elk, which consist of "any legal weapon," "muzzleloader," and "archery" seasons, vary start and end dates in an attempt to reduce overlap with concurrent seasons. Antlerless elk hunts are used where the elk population requires reduction or stabilization (i.e., above population objective). Where populations are above local sub-plan population objectives, a more aggressive harvest strategy is implemented to bring populations closer to objective. In some units, a multiple any legal weapon split-season structure has been implemented to reduce hunter densities, increase hunt quality, and more effectively achieve harvest objectives.

Deleted: August 12, 2016

~~September 21, 2016~~

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 12 of 20

Archery – Antlerless Elk		
<u>Standard Seasons</u>		Dates
<u>061, 071; 062, 064, 066–068; 072, 073, 074; 075; 076, 077, 079, 081; 078, 105–107, and 109</u>		August 1–15
<u>104, 108, 121; 131, 132, 108; 111, 112; 113; 114, 115; 161–164; 221–223; 231; 241, 242</u>		August 1–24

Deleted: Management
Deleted: Areas
Deleted: 6, 7, 12, and 13
Deleted: 11, 16, 17, 22, 23, 24, and 26

Muzzleloader – Antlerless Elk		
<u>Standard Seasons</u>		Dates
<u>072, 073, 074; 075; 076, 077, 079, 081</u>		September 1–16
<u>104, 108, 121; 131, 132, 108; 111, 112; 113; 114, 115; 161–164; 221–223; 231; 241, 242</u>		September 17–24

Deleted: Management Areas
Deleted: 6, 7, 12, and 13
Deleted: 11, 16, 17, 22, 23, 24, and 26

<u>Non-standard Seasons</u>		Dates
078, 105–107, and 109		August 16–31

Deleted: Unit Group

Any Legal Weapon – Antlerless or Spike Elk		
<u>Standard Seasons</u>		Dates
<u>061, 071; 062, 064, 066–068; 072, 073, 074; 075; 076, 077, 079, 081</u>	Early	September 17–October 4
<u>061, 071; 062, 064, 066–068; 072–075; 076, 077, 079, 081</u>	Late	November 21–January 15
<u>111, 112; 113; 114, 115; 104, 108, 121; 108, 131, 132; 161–164, 171–173; 221; 222, 223; 231; 241, 242</u>	Early	September 25–October 4
<u>111, 112; 113; 114, 115; 221; 222, 223</u>	Late	December 5–January 15

Deleted: Management Areas
Formatted Table
Deleted: 6, 7, 12, and 13
Deleted: 9
Deleted: 11, 16, 17, 22, 23, 24, and 26

<u>Non-standard Seasons</u>		Dates
078, 105–107, and 109		September 21–October 5

Deleted: Unit Group

In areas where substantial antlerless harvest is desired and where hunter congestion may be an issue, "antlerless elk combination" hunts may be implemented by issuing an antlerless elk tag to tagholders who are successful in drawing for a mule deer tag for a given weapon class in a hunt unit or unit group where substantial overlap between elk and deer herds occur. This hunt strategy provides an additional option to meet cow elk harvest objectives while reducing the potential for hunter congestion.

Depredation hunts may be implemented in management areas and units with no existing sub-plan, in areas designated as "elk restricted" areas, or to address existing or potential private land conflicts. Depredation hunts are used to liberalize tag quotas and relax eligibility requirements to facilitate the most effective harvest possible. These seasons may be structured to begin and end at any time to best meet the management objectives of the local herd.

Antlerless elk landowner hunts may be implemented to specifically target offending elk on private lands where conflicts occur.

- Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife-habitat conservation and enhancement, and provide incentives for landowners whose private rangelands are used by elk.

Deleted: August 12, 2016

September 21, 2016

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 13 of 20

Harvest management and tag quota prescriptions:

A. Percentage of main beams ≥ 50 inches in the antlered harvest will be used to determine desired antlered elk tag quotas. Data collected from hunter return questionnaires and cementum annuli from tooth submissions indicates a strong relationship between main beam length and age. The length of the main beam of most antlered elk aged ≥ 8 years is reported to be ≥ 50 inches. If the reported percentage falls within the desired range, no change will be made to antlered elk tag quotas. If the reported percentage falls outside of the desired range, antlered elk tag quotas will be adjusted accordingly. Additionally, spike elk harvest is not to exceed 15% of the total antlered harvest.

Standard	
Main beam length ≥ 50 inches	25–35% of bull harvest
Optional spike harvest	$\leq 15\%$ of bull harvest
Hunt units	All units <u>except</u> : 051, 065, 075, 078, 091, 101–103, 111–115, 144–145, 241–242, and 262

Deleted: 061–071,

Alternative	
Main beam length ≥ 50 inches	35–45% of bull harvest
Optional Spike Harvest	$\leq 15\%$ of bull harvest
Hunt units (Not to exceed 4 unit groups)	Units: 078, 091, 111–115

Non-Standard	
Modeled bull to cow ratio	Supports harvestable surplus
Harvest success	Stable
Hunt units	Units: 051, 065, 075, 241, 242, and 262

Deleted: 061–071,

Depredation	
Hunt units	Units: 101–103, and 144–145

B. For antlerless elk in areas where sub-plans exist, quota recommendations are based on specific population management objectives. These objectives may be used to reduce, stabilize, or encourage growth of elk populations. In circumstances where populations are below objective, cow harvest may be designed to slow growth rates while still allowing herds to increase towards population objectives. In areas where no sub-plan currently exists, quota recommendations are based on providing hunting harvest, reducing conflicts (real or perceived) with other resource users, controlling population growth and expansion, or reducing private land depredation issues.

C. Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife conservation, and provide incentives for landowners whose private rangelands are used by elk. Quotas for PIW, Heritage, Silver State and Dream hunts are generally very limited due to the unique nature of the hunts. Quotas for elk incentive hunts are calculated by use days of elk on private lands, as identified in NAC 502.42279.

Deleted: August 12, 2016

September 21, 2016

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 14 of 20*

MOUNTAIN GOATS

The Department's Mountain Goat Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

1. Units may be subdivided into smaller hunt units to prevent hunters concentrating in specific areas within mountain ranges or to encourage hunting within areas with available rams that may be avoided because of access difficulty.
2. All hunts will be "any legal weapon" seasons.
3. Mountain goat seasons for "any mountain goat" will begin and end on standard season dates, running September 1 through October 30.

Harvest management and tag quota prescriptions:

- A. Hunt recommendations should be developed using estimated populations based on survey protocols and sighting rates described in scientific literature. When a clear trend in population parameters exists, emphasize the most recent year's data. When no clear trend exists, emphasize 3-year mean data.
- B. Harvest will be managed to allow for the take of 2–5% of the total population. Game Biologists will manage mountain goats within the guideline range.

MOUNTAIN LION

The Department's Lion Management Goal is to manage the mountain lion population, its numbers, and distribution, as an important part of Nevada's fauna while providing mountain lion hunting and other recreational opportunities.

The Department will establish a statewide harvest objective and monitor harvest within 6 management zones. These zones correspond to the genetic subpopulations identified in recent research within Nevada. Five zones correspond with 5 unique genetic subpopulations identified by. Andreassen et al. (2012). Transient units are defined by NDOW.

Management zones:

1. Central units include 142,143, 144, 145, 155, 161, 162, 163, 171, 172, 183, 184, 251,
2. East units include 102, 103, 104, 105, 106, 108, 109, 111, 112, 113, 114, 115, 121, 231,
3. North units include 044, 045, 046, 051, 061, 062, 064, 065, 066, 067, 068, 071, 072, 073, 074, 075, 076, 077, 078, 079, 081, 091, 101, 107, 141, 151, 152, 153, 154, 156,
4. West units include 011, 012, 013, 014, 015, 021, 022, 032, 033, 034, 041, 192, 194, 195, 196, 201, 202, 203, 204, 206, 291,
5. South units include 131, 132, 133, 134, 164, 221, 222, 223, 241, 242, 243, 244, 245, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 271, 272, 280, 281, 282, 283, 284, 286,
6. Transient units include 031, 035, 042, 043, 181, 182, 205, 207, 208, 211, 212, 213, 252, and
7. Units closed to hunting include 033, 269, 280, 281, 282, 283, 284, 286. which are closed by other administrative regulations imposed by the Department of Defense, US Fish and Wildlife Service, or similar restriction.

Deleted: August 12, 2016

September 21, 2016

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 15 of 20*

Season prescriptions:

1. Hunts for either sex mountain lion "any legal weapon" seasons will occur on March 1 and run until the last day of February of the subsequent year.
2. Mountain lion hunts may be authorized for "either sex" seasons, except that spotted kittens or females accompanied by spotted kittens may not be taken.
3. ~~Unit 091 is managed as an interstate hunt with Utah and will retain a unique harvest objective as developed in conjunction with the interstate hunt.~~
4. The limit is one animal per tag, 2 tag maximum per person per year.
5. Hunting hours are any time of the day or night.

Deleted: 3

Deleted: 4

Harvest management and objective prescriptions:

- A. The number of total and adult female mountain lions removed from each unit will be monitored annually. A premolar will be removed from each harvested mountain lion during the mandatory check procedures. Premolars will be sectioned and age will be determined using cementum aging techniques. If the 3-year mean percentage of adult (≥ 3 year old) female in the regulated hunting seasons within any specific management zone exceeds 35%, the Department will establish a separate harvest objective for that zone to limit harvest (Anderson and Lindzey 2005).
- B. Harvest objectives within a specific management zone may be increased or combined with the statewide harvest objective following 2 consecutive seasons in which the 3-year mean of adult females in the harvest is $\leq 35\%$ of the total harvest.

Deleted: harvest

Deleted: see

MULE DEER

The Department's mule deer management goal is to maintain and enhance deer populations to levels that provide maximum and diverse recreational opportunities, while avoiding adverse effects to the species and its habitat. Harvest objectives for mule deer generally follow the *Nevada Management Plan for Mule Deer* which can be found on the state of Nevada website.

Season prescriptions:

Generally, hunting seasons are for "antlered mule deer" or "antlerless mule deer." "Either sex" tags are issued to junior hunters in accordance with NAC 502.063. "Antlerless mule deer" hunts are used when deer populations require reduction or stabilization and to provide hunter harvest. Antlered mule deer hunts are used to manage the ratio of males to females in the population while maintaining a healthy deer herd.

Hunts for antlered mule deer typically follow a progression from late summer (archery), mid-autumn (muzzleloader) to late autumn months (any legal weapon). Seasons may be split to reduce hunter crowding or more effectively target the timing of harvest. Any legal weapon hunts during the early seasons provide greater opportunity to draw a tag and are primarily designed to achieve management objectives, whereas late seasons provide more opportunities to harvest an older age class buck. Antlerless deer seasons are structured to meet the management objectives of the local herd while still considering antlered hunting seasons and timing of annual surveys as the top priorities.

Junior "either sex" seasons generally coincide with the any legal weapon season for standard mule deer hunts, the muzzleloader season, and the archery season dates for the unit or unit groups in which the hunt is adopted. Junior hunts that coincide with standard and early-late split seasons for the any legal weapon class will begin on October 5 and end on the Sunday following Nevada Day.

Deleted: August 12, 2016

~~September 21, 2016~~

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 16 of 20

Archery	
Standard Early Seasons	August 10–September 9
Late seasons in 071–079, 091 ; Unit 081	November 10–20
Late seasons in 015, 021; _____	December 1–10
Late season in 201, 204; 202, 205–208; 203	December 16–January 1
Late seasons in 192; 194, 196;	December 1–January 1

Deleted: Area 7, Area 10, Area 12, and

Deleted: Area 19

Muzzleloader	
Standard Seasons	September 10– October 4
Unit 181–184	November 10–30
Units 201, 204; 202, 205–208	December 1–15
Units 015, 021; _____	December 11–20
Unit 081	November 21–December 10

Deleted: , Area 20

Any Legal Weapon	
Standard (Single Seasons)	October 5– November 2
Early–Late Split Season	October 5–20; October 21–November 5
_____	_____
Non-standard Seasons	_____
Units 015, 021	December 21–January 1
Unit 081	December 11–January 1
Units 192; 194, 196; 201, 204; 202, 205–208; 203, 211–213; 261–268; 271, 272; 291	November 5–30
Unit 115	December 1–15

Deleted: 31

Deleted: 4

Deleted: October 25–November 5

Deleted: Exceptions

Antlerless	
Standard Early Season	October 10–31
Standard Late Season	November 6–20
_____	_____
Non-standard Seasons	_____
Units 101, 102, 109	October 5–20
Units 071–079, 091	October 15–30

Deleted: Exceptions

Antlered mule deer objectives

For standard hunt units, the Department manages toward ~~25 to 35~~ bucks per 100 does (~~targeting center of range~~) to provide a good experience for hunters that are drawn. The Department also manages some units as "alternative" management areas with higher buck ratios, lower hunter density, and older-age-class animals in the harvest. Alternative management areas are managed ~~30 to 40~~ bucks per 100 does (~~targeting center of range~~) in no more than 8 hunt units throughout the state. In addition to buck ratio objectives, the Department will consider average age

Deleted: 30

Deleted: for 35

Deleted: August 12, 2016

~~September 21, 2016~~

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 17 of 20*

(adult bucks), hunter success rate, and percentage of 4 point or greater when setting appropriate quotas for alternative management areas. The Department will make quota recommendations based on a 3-year trend in management criteria to account for annual environmental variation. When a clear trend does not exist or if two of the four criteria are not met, then the Department will recommend no change to the quota allocation from the previous year.

Harvest objectives and criteria for management of antlered mule deer include:

Standard Hunts	
Buck ratio objective (post season)	30 bucks to 100 does
<u>Unit Groups</u>	Western Region: 011-013; 022; 031; 032; 033; 034; 035; 043-046; 051; 181-184
	Eastern Region: 061; 062; 064; 066 -068; 071-079; 091; 101-109; 111-113; 121; 141-145; 151-156
	Southern Region: 161-164; 171-173; 231

Deleted: Hunt units

Alternative hunts (no more than 8 unit groups statewide)	
Buck ratio objective (post season)	35 bucks to 100 does
Hunter success objective	40-55% Success
Percent of harvested bucks with ≥ 4 points	50-75%
Mean age of harvested bucks ≥ 5 years old	50-75%
<u>Unit Groups</u>	Western Region: 014; 194, 196
	Eastern Region: 065; 081; 114-115; 131-134
	Southern Region: 221-223; 241-245

Deleted: \geq

Deleted: \leq

Deleted: Hunt units

Non-standard Hunts	
Management Strategy A	
Hunter success objective:	$\geq 45\%$ success
<u>Unit Groups</u>	192; 201; 204; 202, 205-208 ; 291; 041-042; 261-268; 271-272
Management Strategy B	
Hunter success objective	35-45% success
<u>Unit Groups</u>	015; 021; 195; 203 ; 211-213; 251-254

Deleted: Hunt units

Deleted: 208,

Deleted: Hunt units

Antlerless mule deer harvest objectives

Antlerless mule deer harvests are used to manage mule deer population size, growth, and to provide hunter harvest in some instances. Recommendations on when to implement an antlerless harvest are based on an overall assessment of the carrying capacity, trends in fawn to doe ratios, body condition of deer either captured or harvested, or a combination of the above factors. Antlerless mule deer hunts would not be recommended in units that have total adult populations $< 2,000$ individuals. In units $\geq 2,000$ individuals, fawn to doe ratios obtained during spring surveys

Deleted: August 12, 2016

~~September 21, 2016~~

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 18 of 20*

or modeled or measured survival of fawns and does will be used to guide Game Biologists to a range of harvest strategy options. Catastrophic environmental events will be considered when recommending doe quotas and could initiate harvests beyond those described in guidelines.

Harvest rate objectives for mule deer populations greater than 2,000 individuals, relative to population trend.

Fawn to 100 does ^a	<30	30-39	>40
Population Trend	Decreasing	Stable	Increasing
Harvest Rate ^b	0-10%	2-6%	2-10%

^a Where possible, a 3-year mean of observed spring fawn to doe ratios would be used, a modeled spring fawn ratio may be considered when 3 years of observed data are not available

^b Harvest rate will be determined as the percentage of the modeled adult female population

Restricted nonresident deer hunts

"Restricted nonresident deer hunts" are designed to provide nonresident hunters an opportunity to hunt with a licensed Nevada guide for mule deer. These tags are drawn in a separate drawing before the main draw for big game and nonresidents must be accompanied by licensed master guide at all times. Any legal weapons may be used during these hunts. Seasons for restricted nonresident deer tags coincide with any legal weapon deer hunts and are issued according to NRS 502.147. Nonresident applicants who apply in the restricted nonresident guided deer hunt are not eligible to apply for deer tags in the big game main draw in the same year.

Landowner compensation tags for mule deer

An owner, lessee, or manager of private land in this state may apply to the Department for the issuance of deer tags for compensation of these animals using their private lands. These tags can be used by the owner, lessee, or manager if he holds a valid Nevada hunting license or the tags can be sold to any holder of a valid Nevada hunting license at any price mutually agreed upon. Landowners, lessees, or managers of private land will be awarded 1 tag for every 50 mule deer present on the property as compensation for damage to private land as per regulation NRS 502.145 and NAC 502.424.

SMALL GAME AND FUR-BEARERS

The Department's Upland Game Management goal is to provide as much upland game hunting as possible. Seasons will be designed to allow standardization and simplification of hunt regulations, better distribution of hunters, and the opportunity to hunt more than 1 species at the same time.

GREATER SAGE-GROUSE

1. Hunting seasons for sage-grouse should be based on careful assessments of population size and trends.
2. If populations occur over relatively large geographic areas and are stable to increasing, seasons and bag limits can be relatively liberal (2- to 4-bird daily bag limit and a 2- to 5-week season) for hunting seasons allowing firearms.
3. If populations are declining (for 3 or more consecutive years) or trends are unknown, seasons and bag limits should be generally conservative (1- or 2-bird daily bag limit and a 1-to 4-week season) for hunting seasons allowing firearms, or suspended (for all types of hunting, including falconry and Native American subsistence hunting) because of this species' population characteristics.
4. Where populations are hunted, harvest rates should be $\leq 10\%$ of the estimated fall population to reduce negative effects on the subsequent year's breeding population.
5. Populations should not be hunted where <300 birds comprise the breeding population (i.e., <100 males are counted on leks).

Deleted: August 12, 2016

September 21, 2016

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 19 of 20*

WILD TURKEY

1. Wild turkey spring seasons will be for "bearded turkey" only.
2. Wild turkey fall season may be for "any" turkey.
3. Spring seasons will be established to begin on the fourth Saturday in March and extend through the first Sunday in May. Season dates may be adjusted or split to avoid hunter crowding or conflicting land uses.
4. Hunting hours will be from 1/2 hour before sunrise to sunset daily for both spring and proposed fall turkey seasons.
5. Fall seasons may be established if population size, access, and hunter densities may be adequately addressed.

OTHER SMALL GAME

1. Upland game seasons will be open statewide when feasible.
 - California, Gambel's, and mountain quail, and chukar and Hungarian partridge season will open on the second Saturday in October and run through the first Sunday in February unless population size and distribution dictates otherwise.
 - Blue (dusky and sooty) and ruffed grouse season will open on September 1 and run through December 31 unless population size and distribution dictates otherwise.
 - Cottontail and pygmy rabbits and white-tailed jackrabbit seasons will open on the second Saturday in October and run through February 28
 - Pheasant season will open on November 1 and run through November 30; seasons will allow for the harvest of "cocks" only
 - Snowcock seasons will open on September 1 and run through November 30
 - A two-day youth season for chuck and Hungarian partridge, California and Gambel's quail, cottontail and pygmy rabbits, and white-tailed jackrabbits will be held annually on the fourth Saturday and Sunday in September.
2. Migratory game bird seasons and bag limits will be set by the Commission annually according to Migratory Bird Treaty Act and Pacific Flyway guidelines.

FUR-BEARERS

The Department's fur-bearing mammal management objectives are to maintain present range, distribution, and population levels in Nevada; and to allow for the maximum recreational, economic and aesthetic uses commensurate with existing populations statewide. Fur-bearer seasons will be set for a 2-year time period. The Department will recommend gray fox seasons that coincide with bobcat season dates. Seasons and season dates will be reviewed by the Commission.

Season prescriptions:

Population estimates for some of the more common furbearer species (beaver, kit fox, gray fox) harvested in Nevada have been generated by using USGS GAP analysis data. GAP data uses maps that delineate topographical, biological, and geological features to identify various habitats. GAP data for each species is paired with habitat suitability models that specify known habitat requirements. This process provided the Department with maps indicating available statewide habitat for each of the species. The GAP data is then used in conjunction with biological density and home range data for each species to generate population estimates. Density and home range data were derived from research data either in Nevada, or in the absence of Nevada research, from nearby states

Deleted: August 12, 2016

September 21, 2016

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 20 of 20

(Utah and California) with similar habitat types. Population estimates and estimated harvest rates based on expanded trapper harvest data will be compared annually. If harvest of any of those species is estimated to be in excess of 10% of the estimated population, the Department will recommend restricting harvest or restrictive seasons.

BOBCAT

Bobcat seasons will be set for a 2-year time period. If warranted, the Department may amend seasons in the interim year. Seasons and season dates and sealing dates will be reviewed with the Commission.

The Department’s bobcat management objectives are to sustain a healthy bobcat population within existing suitable habitat and provide quality recreational opportunities for bobcat harvest. Bobcat populations in Nevada are monitored by using various performance targets. Those targets include production (reported as kittens/ 100 females), Adult male to adult female ratios, harvest effort (average number of trap nights required to harvest one bobcat) and total harvest.

The 3-year average for each performance target will be compared to the historical mean confidence interval for the same target. A value will be assigned to each performance target based on the chart below

Historical statewide 95% confidence limits

Performance Target	Mean	95% Confidence Interval	Using 3-year average for value		
			< 95% C. I. Score	Within 95% C.I. Score	> 95% C.I. Score
Production (kittens/100 females)	66	57-75	-1	0	1
Adult male to adult female ratio (males/ 100 females)	141	137-146	-1	0	1
Effort (trap nights/bobcat harvested)	171	159-183	0.5	0	-0.5
Harvest (total bobcat harvest)	2269	1989 - 2548	0.5	0	-0.5

Season prescriptions (in order of application):

1. Maintain or return to the standard season strategy if at net score of variables (3-year average) are < 2 but > -2.
Standard season ≈ 105 days (Must close no more than 10 days before last weekend in February).
2. Initiate a restrictive season if net score of variables is < -2.
Restrictive season ≈ 70 days (Must close no more than 10 days before last weekend in February).
3. Initiate a liberal season if net score of variables is ≥ 2.
Liberal season ≈ 120 days (November 1 running through the last day in February).
4. During any period if the 3-year average of harvest falls below the low historical range (1,989) AND the 3-year average of individuals reporting bobcat harvest drops below the low historical range (209), the season will remain liberal until either of these two variables increases to within the historical range. Then, the regular season prescriptions will be followed.

Deleted: The Department’s bobcat management objectives are to sustain a healthy bobcat population within existing suitable habitat and provide quality recreational opportunities for bobcat harvest. Bobcat seasons will be set for a 2-year time period. ¶

Season prescriptions:¶

1. Maintain or return to the standard season strategy if at least 2 variables (3-year average) are within the historical 95% confidence interval, or if 1 variable is above, 1 below, and 1 within the historical 95% confidence interval. Emphasize last year’s data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.¶
- Standard season ≈ 94 days (Last Saturday in November and running through last day in February).¶
2. Initiate a restrictive season if 2 or more variables fall below the historic 95% confidence interval. Emphasize last year’s data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.¶
- Restrictive season ≈ 64 days (December 15 running through the third Saturday in February).¶
3. Initiate a liberal season if ≥2 variables are above the historical 95% confidence interval. Emphasize last year’s data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.¶
- Liberal season ≈ 120 days (November 1 running through the last day in February).¶
4. During any period if the 3-year average of harvest falls below the low historical range (1989) AND the 3-year average of individuals reporting bobcat harvest drops below the low historical range (209), the season will default to the liberal season until either of these 2 variables increases to within the historical range. Then, the standard season prescriptions will be followed.¶

Historical 95% confidence limits¶

Variable ...

Deleted: August 12, 2016



STATE OF NEVADA

DEPARTMENT OF WILDLIFE

Game Division

6980 Sierra Center Parkway, Ste 120 • Reno, Nevada 89511
(775) 688-1500 Fax (775) 688-1987

MEMORANDUM**August 19, 2016**

To: Chairs and members of Nevada County Advisory Boards to Manage Wildlife

From: Brian Wakeling, Administrator, Game Division 

Re: **Harvest Guidelines Public Input**

At the County Advisory Board Workshop on Saturday, August 11, 2016, I shared the current practices draft of the existing harvest guidelines and our first internal draft of a set of guidelines for which we are seeking review. At the meeting, I tried to make it clear that we are not amending the targets for which we manage (e.g., 30 bucks to 100 does), but that there may be some better methods for measuring performance toward that objective. In addition, we are striving for consistency in season structure; we are not trying to make all seasons identical across all units, but we are trying to limit our variability. As part of that effort, I mentioned that we would be posting that information on our web site and holding five public meetings across the state to obtain additional input. I intend to share that input with the Commission in September and request their final endorsement of our guidelines in November. When adopted, we intend to use these guidelines to make season and quota recommendations.

Because the CABs are a vital portion of the review process, we shared this first at the CAB Workshop. I am also providing you with a copy of the news release, the web page, and the internal draft revision with highlighted sections for your review and comment. I would encourage you to discuss and provide feedback to the Department at the September Commission meeting. Based on our conversations with Commission in September, we will develop a revision for presentation in November. I will provide that draft to the CABs prior to the November meeting as well for further review.

Thanks for all the work you do for Nevada. Don't hesitate to contact me at 775-688-1520 if you would like to discuss these guidelines in person. I look forward to your feedback.

cc: Nevada Board of Wildlife Commissioners

NEWS from the Nevada Department of Wildlife

Page 1 of 3

Contact: Aaron Meier
Phone: (775) 688-1998
Date: 8/19/2016

Nevada Department of Wildlife to Hold Town Hall Meetings on Game Management

The Nevada Department of Wildlife (NDOW) is holding a series of town hall meetings across the state Aug. 24 – Sept. 7 in an effort to learn what people think is and is not working with Nevada's hunting seasons. This process began last fall when members of the public participated in a first review, and now NDOW is continuing in that effort.

The Game Division is responsible for developing and presenting hunt recommendations for consideration by the County Advisory Boards to Manage Wildlife and the Nevada Board of Wildlife Commission. The guiding principles used in developing these recommendations have not been placed in a single document before, but they have now been compiled in the Harvest Management Guidelines for Nevada.

"Decisions regarding tag quotas are the responsibility of the Nevada Board of Wildlife Commissioners," said Game Division Chief Brian Wakeling. "And it is the job of the game biologist and the Game Division to provide the best recommendations possible for the Commission to act on. We base our recommendations on the best available science on the biology of the species we manage, but we also need to know how we can make things better, easier, and more appealing for the public."

All of the town hall meetings will run from 6 p.m. – 8 p.m. The schedule of the meetings is as follows:

- Wed., Aug. 24 – Ely – Mt Wheeler Power, 1600 Great Basin Blvd.

Nevada Department of Wildlife

Headquarters / Western Region 1100 Valley Road Reno, NV 89512 (775) 688-1500 Fax (775) 688-1595

Eastern Region 60 Youth Center Road Elko, NV 89801 Phone (775) 777-2300

Southern Region 4747 Vegas Drive Las Vegas, NV 89108 Phone (702) 486-5127 Fax (702) 486-5133

NEWS from the Nevada Department of Wildlife

Page 2 of 3

- Thurs., Aug. 25 – Elko – NDOW Office, 60 Youth Center Road
- Fri., Aug. 26 – Winnemucca – Humboldt County Courthouse, 50 W. 5th St., Rm 201
- Tues., Sept. 6 – Las Vegas – Nevada Division of Forestry, 4747 Vegas Dr.
- Wed., Sept. 7 – Reno – NDOW Office, 1100 Valley Road

The public can download the Harvest Management Guidelines for Nevada at the following link: www.ndow.org/Harvest-Management-Guidelines/. Highlighted sections in this document are those that specifically differ from earlier drafts. If you have specific comments, you can mail them to the Game Division at 6980 Sierra Center Parkway, Ste. 120, Reno, NV 89511; FAX them to 775-688-1987; or attend one of the public meetings.

"This is the next step in reviewing and updating our guidelines," said Wakeling. "We intend to share the public input with the County Advisory Boards and the Commission. And we intend to continue our dialogue with the public so that we can share a fully reviewed set of guidelines to the Commission at their September meeting. We can't do that without public comments."

The Nevada Department of Wildlife (NDOW) protects, restores and manages fish and wildlife, and promotes fishing, hunting, and boating safety. NDOW's wildlife and habitat conservation efforts are primarily funded by sportsmen's license and conservation fees and a federal surcharge on hunting and fishing gear. Support wildlife and habitat conservation in Nevada by purchasing a hunting, fishing, or combination license. Find us on Facebook, Twitter or visit us at www.ndow.org.

Nevada Department of Wildlife <i>Experience Nevada's Wildlife . . . It's Worth It!</i>		
<p>Southern Region 4747 Vegas Drive, Las Vegas, NV 89108 Ph (702) 486-5127 Fax (702) 486-5133</p>	<p>Headquarters / Western Region 1100 Valley Road Reno, NV 89512 Ph (775) 688-1500 Fax (775) 688-1595 www.ndow.org</p>	<p>Eastern Region 60 Youth Center Road Elko, NV 89801 Ph (775) 777-2300</p>

NEWS *from the* Nevada Department of Wildlife

Page 3 of 3

- 30 -

Nevada Department of Wildlife <i>Experience Nevada's Wildlife . . . It's Worth It!</i>		
Southern Region 4747 Vegas Drive, Las Vegas, NV 89108 Ph (702) 486-5127 Fax (702) 486-5133	Headquarters / Western Region 1100 Valley Road Reno, NV 89512 Ph (775) 688-1500 Fax (775) 688-1595 www.ndow.org	Eastern Region 60 Youth Center Road Elko, NV 89801 Ph (775) 777-2300



Get Email Updates

Login

HARVEST MANAGEMENT GUIDELINES

The Nevada Department of Wildlife (NDOW) is holding a series of town hall meetings across the state in an effort to learn what people think is and is not working with Nevada's hunting seasons.

The Game Division is responsible for developing and presenting hunt recommendations for consideration by the County Advisory Boards to Manage Wildlife and the Nevada Board of Wildlife Commission. The guiding principles used in developing these recommendations have not been placed in a single document before, but they have now been compiled in the Harvest Management Guidelines for Nevada.

All of the town hall meetings will run from 6 p.m. – 8 p.m. The schedule of the meetings is as follows:

- Wed., Aug. 24 – Ely – Mt Wheeler Power, 1600 Great Basin Blvd.
- Thurs., Aug. 25 – Elko – NDOW Office, 60 Youth Center Road
- Fri., Aug. 26 – Winnemucca – Humboldt County Courthouse, 59 W. 5th St., Rm 201
- Tues., Sept. 6 – Las Vegas – Nevada Division of Forestry, 4747 Vegas Dr.
- Wed., Sept. 7 – Reno – NDOW Office, 1100 Valley Road

The public can download the [Harvest Management Guidelines](#) for Nevada. If you have specific comments, you can mail them to the Game Division at 1100 Valley Road, Reno, NV 89512; FAX them to 775-688-1518; or attend one of the public meetings below.

Explore Nevada:



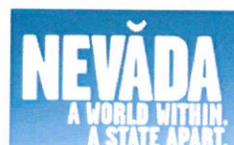
Hunting



Fishing



Boating





NEVADA DEPARTMENT OF WILDLIFE

HARVEST MANAGEMENT GUIDELINES FOR HUNTING SEASONS

Draft August 12, 2016

TABLE OF CONTENTS

Schedule for formulating harvest management guidelines 3

Objective 4

Harvest management guideline approaches 4

Big game 6

Pronghorn antelope 6

Black bear 8

Bighorn sheep 8

Elk 9

Mountain goats 14

Mountain lion 14

Mule deer 15

Small game and fur-bearers 18

Greater sage-grouse 18

Wild turkey 19

Other small game 19

Fur-bearers 19

Bobcat 20

Initial Reviser

SCHEDULE FOR FORMULATING HARVEST MANAGEMENT GUIDELINES

Estimated Date	Harvest Guidelines Schedule	Responsibility
August 8, 2015	Introduce Harvest Management Guidelines to Commission	Game Division
September 25, 2015	Gather existing guidelines into a single document	Game Division
October 9, 2015	Gather comparative data from neighboring states	Game Division
October 16, 2015	Provide draft guidelines generally followed where none exist	Game Division
November 2–6, 2015	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Game Division
November 14, 2015	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
December 5, 2015	Develop revision of harvest management guidelines based on biological data and public opinion	Guidelines Team
January 15, 2016	Second review draft to guidelines committee	Game Division
January 22, 2016	Second review draft to agency	Game Division
January 29, 2016	Draft public survey instrument to seek input on specific questions that may develop	Guidelines Team
April 8, 2016	Summarize feedback from public survey	Guidelines Team
August 13, 2016	Provide Commission with informational update on status of harvest management guidelines	Commission
August 24–26, September 6–7, 2016	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Guidelines Team
September 23–24, 2016	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
October 30, 2016	Final revision to harvest management guidelines	Guidelines Team
November 18–19, 2016	Present to Commission for adoption	Commission

OBJECTIVE

Harvest management guidelines are designed to be used by Nevada Department of Wildlife (Department) Game Biologists when formulating hunt recommendations. Harvest management guidelines are intended to provide general guidance on the parameters for which hunted or trapped species are managed. Like hunt recommendations, harvest management guidelines are shared with the Nevada Board of Wildlife Commissioners (Commission) and County Advisory Boards to Manage Wildlife (CABs) before approval in public session following a regular review cycle described in the preceding pages.

The harvest management guidelines themselves are one piece of an overall planning approach used by the Commission and Department in managing wildlife. While harvest management guidelines describe the objectives to which the Department manages, other protocols describe how that data is collected. Management plans (e.g., species management plans and related sub-planning documents) describe landscape level objectives, opportunities for habitat enhancement, specific herd management objectives (e.g., increase population), and management challenges (e.g., persistent low fawn recruitment for pronghorn).

The Department also operates under a Commission-approved strategic plan that provides agency vision, an annual work plan developed under the Wildlife and Sport Fish Restoration (WSFR) Program, annual or biennial translocation plans approved by the Commission, and an annual implementation plan that ties together budgets, specific tasks, and work units for the upcoming year.

The Department manages Nevada's wildlife within the biological limits of each species. Management strategies are developed to address social perceptions, which are routinely more conservative than the limits at which wildlife may be biologically managed.

Ultimately, the Department manages wildlife in the public trust for all of Nevada's citizens. All game animals, from predators to big game, are managed as part of an important ecosystem to be sustained for future generations of Nevadans and our visitors to enjoy. These harvest management guidelines have been developed to meet a variety of hunting desires and strive to provide adequate opportunity for all, while maintaining a self-sustaining resource. The guidelines are based on the best available biological and social science. Nevada has a diverse wildlife resource, yet many of these resources are limited in supply. The following guidelines attempt to provide the diversity of experiences desired by the hunters of Nevada, while providing the necessary management so that everyone will benefit from diverse wildlife populations in the future.

HARVEST MANAGEMENT GUIDELINE APPROACHES

The Department and Commission will revisit the guideline package with the public every 4 years. The 4-year harvest guideline framework aligns with the following approaches:

- Obtain input from the Commission on hunt guideline concerns that were brought to their attention; use this input to guide public survey questions.
- Use CABs and public outreach avenues to ensure inclusion of affected and interested customers in guideline and hunt recommendation development.
- Commission Policy 24 provides direction to the Department in formulating hunting seasons and tag quotas.
- Seasons are recommended biennially, with recommendations from the Department of Wildlife to CABs and the Nevada Board of Wildlife Commissioners.
- Maintain consistent wildlife survey protocol and interpretation to develop hunt recommendations across the state in accordance with other pertinent management plans (e.g., species management plans and annual work plans). Population management objectives (including male to female ratios, harvest rate, or other

parameters by which we manage populations) for specific units may be described within these pertinent species management plans.

- Provide hunt structures across the state consistent with Commission policy and statewide species plans. Simplify hunt regulations and restrictions related to the hunt structure. Standardized and simplified hunt structures should not obstruct diversity of hunting opportunities.
- Provide for a diversity of hunter opportunity while maintaining wildlife population health. Guidelines for this approach are:
 - Limit hunting seasons when the legal animals are most vulnerable (e.g., breeding period) except to provide alternative or late hunting seasons in some management areas.
 - Allocate hunt tag quotas with respect to weapon type demand per Commission Policy 24.
 - Use innovative management hunts to address specific management objectives that are not being achieved through standard hunt structures.
 - Use split hunt structure to reduce user conflicts and hunter densities.
 - Use targeted harvest by hunters to address human-wildlife conflicts when appropriate.
 - Reserve about 10% hunting tag quotas for nonresident hunters in limited entry hunts.
- Emphasize youth and new big game hunter opportunities when possible. In doing so, provide diverse and dispersed hunt opportunities to allow equitable tag availability and limited conflict with other uses.
- Emphasize small game, predator-furbearer, and other wildlife hunt opportunities. Guidelines for this approach are:
 - Liberalize bag and possession limits as well as season lengths within sustainable biological means to encourage hunter participation.
 - Maintain consistent season opener and structure to reduce hunter confusion among years.

BIG GAME

BIOLOGICAL FRAMEWORK

The Department conducts annual or biennial surveys to determine composition (i.e., sex and age) of ungulate populations. Data collected during those surveys are subsequently incorporated into deterministic population models to derive population estimates. These population estimates are used by the Department to assess male to female ratios, recruitment, population trends, and ultimately provide the starting point for determining the amount of harvestable surplus available from each population.

Harvest is an important tool for managing populations of wild ungulates. Although male to female ratios in wild ungulates bear little effect on population productivity, it is a substantial consideration for the Department when assessing tag quotas. Indeed, ratios in wild ungulates can vary from 10–50 males per 100 females without a noticeable effect on juvenile recruitment. The variation in male to female ratios can, however, have a noticeable effect on hunter satisfaction, hunt quality, and harvest success. Managing populations toward the lower end of the male to female ratio would allow more hunters to participate in a hunt (i.e., chance to draw a tag more frequently) and result in a fewer older age class males in the ungulate population, whereas managing at the upper end of the ratio provides fewer hunters with the ability to participate in a hunt (i.e., chance to draw a tag every 3-4 years) while yielding higher hunt success for those that draw a tag with an older age structure in the ungulate population. The Department has set management objectives at the mid-to-upper point of the biologically sustainable male to female ratio for all wild ungulates. The Department may recommend a quota reduction when the recorded male to female ratio is below objectives and may recommend a quota increase when the recorded male to female ratio is above objectives.

In contrast to male to female ratios, the juvenile to female ratio directly influences population productivity. The Department assesses current and historical juvenile to female ratios to determine population trends because of its correlation with recruitment of new individuals into the breeding population. In general, a ratio above 30-40 juveniles per 100 females suggests a stable or increasing population, while a ratio below 30-40 juveniles per 100 females suggests a declining population and is characteristic of a population at or near carrying capacity. In most cases, the Department manages for stable or increasing populations and may recommend an increase in the quota if the juvenile to female ratio is above the sustainability threshold. When the juvenile to female ratio is low, the Department may recommend a decrease in the male quota and the inclusion of a female hunt or an increase in the female quota.

PRONGHORN ANTELOPE

The Department's Pronghorn Antelope Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

Current harvest objectives for pronghorn antelope are set forth in the Department's pronghorn antelope management plan: *Nevada's Pronghorn Antelope, Ecology, Management, And Conservation (2003)* and subsequent Commission action: *Nevada Board of Wildlife Commissioners Policy for the Management of Pronghorn Antelope (2003)*.

Season prescriptions:

1. Pronghorn antelope hunts may be authorized for either "horns-longer-than-ears" (buck) or "horns-shorter-than-ears" (doe).
2. Hunts for horns-longer-than-ears pronghorn antelope involve the following weapon classes: "any legal weapon," "muzzleloader," and "archery" seasons. These seasons generally occur on standard opening dates within the state. In limited cases, seasons are split to reduce hunter densities or more effectively target harvest timing.

Nevada Department of Wildlife
 Harvest Management Guidelines for Hunting Seasons
 Page 7 of 20

3. Where they occur, standard hunts for horns-shorter-than-ears pronghorn antelope are limited to “any legal weapon” seasons.

Horns-longer-than-ears archery	
Standard Season	August 1–September 17

Horns-longer-than-ears muzzleloader	
Standard Season	August 18–25

Horns-longer-than-ears any legal weapon	
Standard Season	August 26–September 7
Late Season	September 25–October 4

Horns-shorter-than-ears any legal weapon	
Standard Season	September 8–20

Harvest management and tag quota prescriptions:

- A. Annual composition survey data are used in computer population models to assist Game Biologists in estimating the pre-hunt adult population size. A representative sample of each herd is observed through aerial or ground surveys to determine age (young to adult) and sex (male to female) ratios. These pre-hunt adult population estimates and male to female ratios used are for determining quotas targeting desired post-hunt buck to doe ratio objectives, demand by weapon class, and hunter success rates.

Harvest levels for horns-longer-than-ears (buck) pronghorn are based on a desired post-season buck ratio objective of 20–30 adult (≥ 2 year old) bucks per 100 does. The target buck to doe ratio is based on adult bucks because many yearling bucks have horns lengths that would make them unlawful for harvest.

Standard units	
Buck to doe ratio objective	25 bucks to 100 does
Applicable hunt units	All open units

- B. Harvest levels for horns-shorter-than-ears pronghorn are determined on a hunt unit basis to allow for herd population management and to provide additional and desired hunting opportunities to harvest pronghorn does. Doe harvest criteria are based on specific criteria to the individual herd.

Doe harvest is typically managed within the range of 0–20% of the total adult doe population. Harvest rates may fall outside this range in the case of catastrophic environmental events or other unique situations.

Pre-hunt adult doe estimate	Pre-hunt buck ratio estimate	Observed fawn ratio	Desired harvest rate
0–300	>30	3-year stable or increasing	0–10%
300–500	>30	3-year stable or increasing	0–20%
>500	>30	3-year stable or increasing	5–20%

In some instances, fawn to doe ratios may decline when the population approaches the capacity of the habitat, and in those instances doe harvest may be needed to maintain healthy populations.

Private land issues

Issues involving private land depredation are managed in accordance with NAC 502.424. Emergency depredation hunts may be employed.

BLACK BEAR

The Department's Bear Management Goal is to manage black bear population numbers and distribution as an important part of Nevada's fauna, while providing hunting and other related recreational opportunities. The hunt recommendation goal is to allow bear hunting harvest, while managing for representation of older age cohorts of both sexes in the population.

Season prescriptions:

1. Black bear hunts may be authorized for "either sex" seasons, except that cubs or a sow accompanied by cubs may not be taken.
2. Hunts for either sex black bear "any legal weapon" seasons will occur on standard opening dates.

Any legal weapon seasons may begin on September 15 and run through December 31

Harvest management and tag quota prescriptions:

- A. Game Biologists will manage black bear harvest toward moderate harvest, while considering modeled population trends.
- B. Tags and harvest limits may be adjusted to maintain light or moderate harvests. The most recent 3-year mean or trend should receive greater emphasis when determining permit levels; emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Parameter	Light harvest	Moderate harvest	Heavy harvest
Percent females in harvest	<30%	30–40%	>40%
Percent adult females within female harvest	>55%	45–55%	<45%
Mean age of harvested males	>4 years	2–4 years	<2 years

BIGHORN SHEEP

As stated in the statewide Bighorn Sheep Management Plan, the Department's goals are to restore and maintain bighorn sheep herds at optimal population levels, provide diverse recreational opportunities, recognize hunting is a legitimate and desirable use of the bighorn sheep resource, strongly advocate habitats be maintained in good ecological condition, and reduce and manage risk of disease transmission.

Season prescriptions:

1. Units will be the primary geographic basis for managing bighorn harvest. Units may be subdivided to more optimally spread hunting pressure and harvest to all known areas of bighorn distribution during the hunting season.

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 9 of 20*

2. All hunts are "any legal weapon" seasons.
3. Standard California and Rocky Mountain bighorn ram seasons will run September 1 through October 30, whereas most desert (Nelson) bighorn sheep seasons will run November 20 through December 20. Split or extended seasons may be implemented if hunter crowding and hunt efficacy becomes an issue. Standard season length will not be less than 21 days. For hunts involving Department of Defense lands, the north range season will start on the Saturday closest to Nov 20 and run for 23 days, and the south range season will begin on the third Saturday in December and run for 16 days.
4. Bighorn ewe seasons will be no shorter than 21 days and will occur on dates that do not overlap with bighorn ram seasons in same unit. Other considerations are to reduce overlap with mule deer rifle seasons in same unit and to accommodate optimal timing of bighorn sheep captures for management and disease surveillance.

Harvest management and target quota prescriptions:

- A. Ram tag numbers will be recommended at 8% of total estimated rams, not to exceed 50% of the estimated Class III and IV rams (i.e., rams ≥ 6 years of age) derived from a reconstructive deterministic population model for each herd based on aerial survey data (primarily recruitment), best available survival rates, and estimated ingress-egress. These criteria are expected to obtain a 3-year average age of harvested rams of 6 years or older within each unit.
- B. Criteria for establishing ewe hunts and tag numbers will be based on maintaining herd size at or below established sustainable management levels (SML) for herds of concern with seasonal or yearlong habitat resource limitations, past cyclical declines associated with record high SML, or proximity to known disease risk. Opportunities for removal of source stock animals for low risk translocations will be considered prior to recommending ewe harvest.

ELK

The Department's Elk Management Goal is to maintain elk populations to meet population objectives, while providing recreational opportunities and avoiding adverse impacts to the species, its habitat, and reducing land use conflicts. The Commission has adopted various local sub-plans, which provide broad and specific management goals for elk in Nevada and identify additional objectives specific to those areas.

Harvest objectives for elk are set forth in the Department's *Nevada Elk Species Management Plan (1997)* and 10 subordinate sub-plans: *Bruneau River Watershed Environmental Analysis (1994)*; *Wells Resource Management Plan, Elk Amendment and Decision Record (1995)*; *Environmental Assessment for the Release of Elk into the Jarbidge Mountains, Nevada (1997)*; *NDOW Decision For Lands Outside of Wells RMP Elk Amendment Subplan; Central Nevada Elk Plan (2004)*; *Conservation Agreement for the Spring Mountain National Recreation Area (1998)*; *the White Pine County Elk Plan (1999)*; *Lincoln County Elk Management Plan (2003)*; *the Western Elko County Elk Management Plan (2003)*, and *the Humboldt County Elk Management Sub-Plan (2016)*.

Season prescriptions:

Because of high population growth rates observed in most elk herds and conservative population objectives identified in elk sub-plans, the need to increase harvest on elk to reduce both population size and growth rates has required aggressive hunt structures to maximize the harvest of antlerless elk. These aggressive season structures and quotas are designed to meet the population objectives and minimize conflicts with other hunts. Standardized season dates are implemented when practical. Population objectives identified in local sub-plans, however, may supersede the implementation of a standardized season. Elk hunts are currently authorized for "antlered elk" (i.e., bull), "spike-only elk," or "antlerless elk" (i.e., cow).

1. Antlered elk hunts, which consist of "any legal weapon," "muzzleloader," and "archery" seasons, may have varied dates among units to reduce overlap with concurrent hunt seasons for other species. In some units a

multiple any-legal-weapon split-season (i.e., early-late) structure has been employed to reduce hunter densities, increase hunt quality, and more effectively achieve desired harvest objectives.

Any Legal Weapon – Antlered Elk		
Management Areas		Dates
6, 7, 12, and 13	Early	October 22–November 5
	Late	Nov. 6 Nov. 20

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26	Early	November 6–20
	Late	November 21–December 4

Unit Group		Dates
078, 105–107, and 109	Early	October 22–November 5
	Late	November 6–28

Hunt Units		Dates
051 and 065		September 17–30

Muzzleloader - Antlered Elk		
Management Areas		Dates
6, 7, 12, and 13		September 1–16

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26		October 22–November 5

Unit Group		Dates
078, 105–107, and 109		October 5–21

Archery - Antlered Elk		
Management Areas		Dates
6, 7, 12, & 13		August 16–31

Management Areas		Dates
11, 16, 17, 22, 23, 24, & 26		August 25–September 16

Unit Group		Dates

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 11 of 20*

078, 105–107, 109	September 1–20
--------------------------	-----------------------

2. Spike Elk Hunts are established in identified hunt units to reduce the hunting pressure and harvest of mature bulls, while still managing population and harvest objectives. Spike elk hunts will run concurrent with Antlerless Elk seasons since the majority of spike elk occur in cow-calf elk groups.
3. Hunts for antlerless elk, which consist of "any legal weapon," "muzzleloader," and "archery" seasons, vary start and end dates in an attempt to reduce overlap with concurrent seasons. Antlerless elk hunts are used where the elk population requires reduction or stabilization (i.e., above population objective). Where populations are above local sub-plan population objectives, a more aggressive harvest strategy is implemented to bring populations closer to objective. In some units, a multiple any legal weapon split-season structure has been implemented to reduce hunter densities, increase hunt quality, and more effectively achieve harvest objectives.

Any Legal Weapon – Antlerless or spike elk		
Management Areas		Dates
6, 7, 12, and 13	Early	September 17–October 4
	Late	November 21–January 15

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26	Early	September 25–October 9
	Late	December 5–January 15

Unit Group		Dates
078, 105–107, and 109		September 21–October 5

Muzzleloader – Antlerless Elk		
Management Areas		Dates
6, 7, 12, and 13		September 1–16

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26		September 17–24

Unit Group		Dates
078, 105–107, and 109		August 16–31

Archery - Antlerless Elk - 4111
--

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 12 of 20*

Management Areas		
6, 7, 12, and 13		August 1–15
Management Areas		
11, 16, 17, 22, 23, 24, and 26		August 1–24
Unit Group		
078, 105–107, and 109		August 1–15

In areas where substantial antlerless harvest is desired and where hunter congestion may be an issue, "antlerless elk combination" hunts may be implemented by issuing an antlerless elk tag to tagholders who are successful in drawing for a mule deer tag for a given weapon class in a hunt unit or unit group where substantial overlap between elk and deer herds occur. This hunt strategy provides an additional option to meet cow elk harvest objectives while reducing the potential for hunter congestion.

Depredation hunts may be implemented in management areas and units with no existing sub-plan, in areas designated as "elk restricted" areas, or to address existing or potential private land conflicts. Depredation hunts are used to liberalize tag quotas and relax eligibility requirements to facilitate the most effective harvest possible. These seasons may be structured to begin and end at any time to best meet the management objectives of the local herd.

Antlerless elk landowner hunts may be implemented to specifically target offending elk on private lands where conflicts occur.

- Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife-habitat conservation and enhancement, and provide incentives for landowners whose private rangelands are used by elk.

Specialty Elk Hunts	
Hunt	Hunt Dates
PIW Resident Elk Antlered Any Legal Weapon	Standard dates for hunts 4151, 4161, 4156
Heritage Elk Any Legal Weapon	July 1 – February 29 in any open elk unit
Silver State Elk Any Legal Weapon – 4300	July 1 – February 29 in any open elk unit
Dream Elk Any Legal Weapon – 4500	Standard dates for hunts 4151, 4161, 4156
Elk Incentive Any Legal Weapon Hunt – 4131 & 4231	Standard dates for hunt 4151
Elk Incentive Muzzleloader Hunt – 4133 & 4233	Standard dates for hunt 4156
Elk Incentive Archery Hunt – 4132 & 4232	Standard dates for hunt 4161

Harvest management and tag quota prescriptions:

- Percentage of main beams ≥ 50 inches in the antlered harvest will be used to determine desired antlered elk tag quotas. Data collected from hunter return questionnaires and cementum annuli from tooth submissions indicates a strong relationship between main beam length and age. The length of the main beam of most antlered elk aged ≥ 8 years is reported to be ≥ 50 inches. If the reported percentage falls within the desired range, no change will be made to antlered elk tag quotas. If the reported percentage falls outside of the desired range, antlered elk tag quotas will be adjusted accordingly. Additionally, spike elk harvest is not to exceed 15% of the total antlered harvest.

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 13 of 20*

Standard	
Main beam length ≥ 50 inches	25–35% of bull harvest
Optional spike harvest	$\leq 15\%$ of bull harvest
Hunt units	All units except: 051, 061–071, 065, 075, 078, 091, 101–103, 111–115, 144–145, 241–242, and 262

Alternative	
Main beam length ≥ 50 inches	35–45% of bull harvest
Optional Spike Harvest	$\leq 15\%$ of bull harvest
Hunt units (Not to exceed 4 unit groups)	Units: 078, 091, 111–115

Non-Standard	
Modeled bull to cow ratio	Supports harvestable surplus
Harvest success	Stable
Hunt units	Units: 051, 061–071, 065, 075, 241–242, and 262

Depredation	
Hunt units	Units: 101–103, and 144–145

B. For antlerless elk in areas where sub-plans exist, quota recommendations are based on specific population management objectives. These objectives may be used to reduce, stabilize, or encourage growth of elk populations. In circumstances where populations are below objective, cow harvest may be designed to slow growth rates while still allowing herds to increase towards population objectives. In areas where no sub-plan currently exists, quota recommendations are based on providing hunting harvest, reducing conflicts (real or perceived) with other resource users, controlling population growth and expansion, or reducing private land depredation issues.

C. Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife conservation, and provide incentives for landowners whose private rangelands are used by elk. Quotas for PIW, Heritage, Silver State and Dream hunts are generally very limited due to the unique nature of the hunts. Quotas for elk incentive hunts are calculated by use days of elk on private lands, as identified in NAC 502.42279.

MOUNTAIN GOATS

The Department's Mountain Goat Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

- Units may be subdivided into smaller hunt units to prevent hunters concentrating in specific areas within mountain ranges or to encourage hunting within areas with available rams that may be avoided because of access difficulty.
- All hunts will be "any legal weapon" seasons.

3. Mountain goat seasons for "any mountain goat" will begin and end on standard season dates, running September 1 through October 30.

Harvest management and tag quota prescriptions:

- A. Hunt recommendations should be developed using estimated populations based on survey protocols and sighting rates described in scientific literature. When a clear trend in population parameters exists, emphasize the most recent year's data. When no clear trend exists, emphasize 3-year mean data.
- B. Harvest will be managed to allow for the take of 2–5% of the total population. Game Biologists will manage mountain goats within the guideline range.

MOUNTAIN LION

The Department's Lion Management Goal is to manage the mountain lion population, its numbers, and distribution, as an important part of Nevada's fauna while providing mountain lion hunting and other recreational opportunities.

The Department will establish a statewide harvest objective and monitor harvest within 6 management zones. These zones correspond to the genetic subpopulations identified in recent research within Nevada. Five zones correspond with 5 unique genetic subpopulations identified by Andreasen et al. (2012). Transient units are defined by NDOW.

Management zones:

1. Central units include 142,143, 144, 145, 155, 161, 162, 163, 171, 172, 183, 184, 251,
2. East units include 102, 103, 104, 105, 106, 108, 109, 111, 112, 113, 114, 115, 121, 231,
3. North units include 44, 45, 46, 51, 61, 62, 64, 65, 66, 67, 68, 71, 72, 73, 74, 75, 76, 77, 78, 79, 81, 91, 101, 107, 141, 151, 152, 153, 154, 156,
4. West units include 011, 012, 013, 014, 015, 021, 022, 032, 033, 034, 041, 192, 194, 195, 196, 201, 202, 203, 204, 206, 291,
5. South units include 131, 132, 133, 134, 164, 221, 222, 223, 241, 242, 243, 244, 245, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 271, 272, 280, 281, 282, 283, 284, 286,
6. Transient units include 031, 035, 042, 043, 181, 182, 205, 207, 208, 211, 212, 213, 252, and
7. Units closed to hunting include 033, 269, 280, 281, 282, 283, 284, 286. which are closed by other administrative regulations imposed by the Department of Defense, US Fish and Wildlife Service, or similar restriction.

Season prescriptions:

1. Hunts for either sex mountain lion "any legal weapon" seasons will occur on March 1 and run until the last day of February of the subsequent year.
2. Mountain lion hunts may be authorized for "either sex" seasons, except that spotted kittens or females accompanied by spotted kittens may not be taken.
3. The limit is one animal per tag, 2 tag maximum per person per year.
4. Hunting hours are any time of the day or night.

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 15 of 20*

Harvest management and objective prescriptions:

- A. The number of total and adult female mountain lions removed from each unit will be monitored annually. A premolar will be removed from each harvested mountain lion during the mandatory check procedures. Premolars will be sectioned and age will be determined using cementum aging techniques. If the 3-year mean percentage of adult (≥ 3 year old) female in the harvest within any specific management zone exceeds 35%, the Department will establish a separate harvest objective for that zone to limit harvest (see Anderson and Lindzey 2005).
- B. Harvest objectives within a specific management zone may be increased or combined with the statewide harvest objective following 2 consecutive seasons in which the 3-year mean of adult females in the harvest is $\leq 35\%$ of the total harvest.

MULE DEER

The Department's mule deer management goal is to maintain and enhance deer populations to levels that provide maximum and diverse recreational opportunities, while avoiding adverse effects to the species and its habitat. Harvest objectives for mule deer generally follow the *Nevada Management Plan for Mule Deer* which can be found on the state of Nevada website.

Season prescriptions:

Generally, hunting seasons are for "antlered mule deer" or "antlerless mule deer." "Either sex" tags are issued to junior hunters in accordance with NAC 502.063. "Antlerless mule deer" hunts are used when deer populations require reduction or stabilization and to provide hunter harvest. Antlered mule deer hunts are used to manage the ratio of males to females in the population while maintaining a healthy deer herd.

Hunts for antlered mule deer typically follow a progression from late summer (archery), mid-autumn (muzzleloader) to late autumn months (any legal weapon). Seasons may be split to reduce hunter crowding or more effectively target the timing of harvest. Any legal weapon hunts during the early seasons provide greater opportunity to draw a tag and are primarily designed to achieve management objectives, whereas late seasons provide more opportunities to harvest an older age class buck. Antlerless deer seasons are structured to meet the management objectives of the local herd while still considering antlered hunting seasons and timing of annual surveys as the top priorities.

Junior "either sex" seasons coincide with the any legal weapon season for standard mule deer hunts, the muzzleloader season, and the archery season dates for the unit or unit groups in which the hunt is adopted. Junior hunts that coincide with standard and early-late split seasons for the any legal weapon class will begin on October 5 and end on the Sunday following Nevada Day.

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 16 of 20*

Archery	
Standard Early Seasons	August 10–September 9
Late seasons in Area 7, Area 10, Area 12, and Unit 081	November 10–20
Late seasons in Area 19, Area 20, and Units 015, 021	December 1–10

Muzzleloader	
Standard Seasons	September 10– October 4
Unit 181-184	November 10–30
Units 015, 021, Area 20	December 11–20
Unit 081	November 21–December 10

Any Legal Weapon	
Standard (Single Seasons)	October 5–31
Early-Late Split Season	October 5–24
	October 25–November 5
<i>Exceptions</i>	
Units 015, 021	December 21–January 1
Unit 081	December 11–January 1

Antlerless	
Standard Early Season	October 10–31
Standard Late Season	November 6–20
<i>Exceptions</i>	
Units 101, 102, 109	October 5–20
Units 071-079, 091	October 15–30

Antlered mule deer objectives

For standard hunt units, the Department manages toward 30 bucks per 100 does to provide a good experience for hunters that are drawn. The Department also manages some units as "alternative" management areas with higher buck ratios, lower hunter density, and older-age-class animals in the harvest. Alternative management areas are managed for 35 bucks per 100 does in no more than 8 hunt units throughout the state. In addition to buck ratio objectives, the Department will consider average age (adult bucks), hunter success rate, and percentage of 4 point or greater when setting appropriate quotas for alternative management areas. The Department will make quota recommendations based on a 3-year trend in management criteria to account for annual environmental variation. When a clear trend does not exist or if two of the four criteria are not met, then the Department will recommend no change to the quota allocation from the previous year.

Harvest objectives and criteria for management of antlered mule deer include:

Standard Hunts	
Buck ratio objective (post season)	30 bucks to 100 does
Hunt units	Western Region: 011–013, 022, 031, 032, 033, 034, 035, 043–046, 051, 181–184
	Eastern Region: 061–068, 071–079, 091, 101–109, 111–113, 121, 141–145, 151–156
	Southern Region: 161–164, 171–173, 231

Alternative hunts (no more than 8 unit groups statewide)	
Buck ratio objective (post season)	≥35 bucks to 100 does
Hunter success objective	40–55% Success
Percent of harvested bucks with ≤4 points	50–75%
Mean age of harvested bucks ≥5 years old	50–75%
Hunt units	Western Region: 014, 194–196
	Eastern Region: 065,081,114–115, 131–134
	Southern Region: 221–223, 241–245

Non-standard Hunts	
Management Strategy A	
Hunter success objective:	≥45% success
Hunt units	192, 201–208, 291, 041–042;, 261–268, 271–272
Management Strategy B	
Hunter success objective	35–45% success
Hunt units	015, 021, 195; 211–213, 251–254

Antlerless mule deer harvest objectives

Antlerless mule deer harvests are used to manage mule deer population size, growth, and to provide hunter harvest in some instances. Recommendations on when to implement an antlerless harvest are based on an overall assessment of the carrying capacity, trends in fawn to doe ratios, body condition of deer either captured or harvested, or a combination of the above factors. Antlerless mule deer hunts would not be recommended in units that have total adult populations <2,000 individuals. In units ≥2,000 individuals, fawn to doe ratios obtained during spring surveys or modeled or measured survival of fawns and does will be used to guide Game Biologists to a range of harvest strategy options. Catastrophic environmental events will be considered when recommending doe quotas and could initiate harvests beyond those described in guidelines.

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 18 of 20*

Harvest rate objectives for mule deer populations greater than 2,000 individuals, relative to population trend.

Fawn to 100 does^a	<30	30-39	>40
Population Trend	Decreasing	Stable	Increasing
Harvest Rate^b	0-10%	2-6%	2-10%

^a Where possible, a 3-year mean of observed spring fawn to doe ratios would be used, a modeled spring fawn ratio may be considered when 3 years of observed data are not available

^b Harvest rate will be determined as the percentage of the modeled adult female population

Restricted nonresident deer hunts

"Restricted nonresident deer hunts" are designed to provide nonresident hunters an opportunity to hunt with a licensed Nevada guide for mule deer. These tags are drawn in a separate drawing before the main draw for big game and nonresidents must be accompanied by licensed master guide at all times. Any legal weapons may be used during these hunts. Seasons for restricted nonresident deer tags coincide with any legal weapon deer hunts and are issued according to NRS 502.147. Nonresident applicants who apply in the restricted nonresident guided deer hunt are not eligible to apply for deer tags in the big game main draw in the same year.

Landowner compensation tags for mule deer

An owner, lessee, or manager of private land in this state may apply to the Department for the issuance of deer tags for compensation of these animals using their private lands. These tags can be used by the owner, lessee, or manager if he holds a valid Nevada hunting license or the tags can be sold to any holder of a valid Nevada hunting license at any price mutually agreed upon. Landowners, lessees, or managers of private land will be awarded 1 tag for every 50 mule deer present on the property as compensation for damage to private land as per regulation NRS 502.145 and NAC 502.424.

SMALL GAME AND FUR-BEARERS

The Department's Upland Game Management goal is to provide as much upland game hunting as possible. Seasons will be designed to allow standardization and simplification of hunt regulations, better distribution of hunters, and the opportunity to hunt more than 1 species at the same time.

GREATER SAGE-GROUSE

1. Hunting seasons for sage-grouse should be based on careful assessments of population size and trends.
2. If populations occur over relatively large geographic areas and are stable to increasing, seasons and bag limits can be relatively liberal (2- to 4-bird daily bag limit and a 2- to 5-week season) for hunting seasons allowing firearms.
3. If populations are declining (for 3 or more consecutive years) or trends are unknown, seasons and bag limits should be generally conservative (1- or 2-bird daily bag limit and a 1-to 4-week season) for hunting seasons allowing firearms, or suspended (for all types of hunting, including falconry and Native American subsistence hunting) because of this species' population characteristics.
4. Where populations are hunted, harvest rates should be $\leq 10\%$ of the estimated fall population to reduce negative effects on the subsequent year's breeding population.
5. Populations should not be hunted where <300 birds comprise the breeding population (i.e., <100 males are counted on leks).

WILD TURKEY

1. Wild turkey spring seasons will be for "bearded turkey" only.
2. Wild turkey fall season may be for "any" turkey.
3. Spring seasons will be established to begin on the fourth Saturday in March and extend through the first Sunday in May. Season dates may be adjusted or split to avoid hunter crowding or conflicting land uses.
4. Hunting hours will be from sunrise to sunset daily for both spring and proposed fall turkey seasons.
5. Fall seasons may be established if population size, access, and hunter densities may be adequately addressed.

OTHER SMALL GAME

1. Upland game seasons will be open statewide when feasible.
 - California, Gambel's, and mountain quail, and chukar and Hungarian partridge season will open on the second Saturday in October and run through the first Sunday in February unless population size and distribution dictates otherwise.
 - Blue (dusky and sooty) and ruffed grouse season will open on September 1 and run through December 31 unless population size and distribution dictates otherwise.
 - Cottontail and pygmy rabbits and white-tailed jackrabbit seasons will open on the second Saturday in October and run through February 28
 - Pheasant season will open on November 1 and run through November 30; seasons will allow for the harvest of "cocks" only
 - Snowcock seasons will open on September 1 and run through November 30
 - A two-day youth season for chuck and Hungarian partridge, California and Gambel's quail, cottontail and pygmy rabbits, and white-tailed jackrabbits will be held annually on the fourth Saturday and Sunday in September.
2. Migratory game bird seasons and bag limits will be set by the Commission annually according to Migratory Bird Treaty Act and Pacific Flyway guidelines.

FUR-BEARERS

The Department's fur-bearing mammal management objectives are to maintain present range, distribution, and population levels in Nevada; and to allow for the maximum recreational, economic and aesthetic uses commensurate with existing populations statewide. Fur-bearer seasons will be set for a 2-year time period. Seasons and season dates will be reviewed by the commission.

Season prescriptions:

Population estimates for some of the more common furbearer species (beaver, kit fox, gray fox) harvested in Nevada have been generated by using USGS GAP analysis data. GAP data uses maps that delineate topographical, biological, and geological features to identify various habitats. GAP data for each species is paired with habitat suitability models that specify known habitat requirements. This process provided the Department with maps indicating available statewide habitat for each of the species. The GAP data is then used in conjunction with biological density and home range data for each species to generate population estimates. Density and home range data were derived from research data either in Nevada, or in the absence of Nevada research, from nearby states (Utah and California) with similar habitat types. Population estimates and estimated harvest rates based on expanded trapper harvest data will be compared annually. If harvest of any of those species is estimated to be in excess of 10% of the estimated population, the Department will recommend restricting harvest.

*Nevada Department of Wildlife
Harvest Management Guidelines for Hunting Seasons
Page 20 of 20*

BOBCAT

The Department's bobcat management objectives are to sustain a healthy bobcat population within existing suitable habitat and provide quality recreational opportunities for bobcat harvest. Bobcat seasons will be set for a 2-year time period.

Season prescriptions:

1. Maintain or return to the standard season strategy if at least 2 variables (3-year average) are within the historical 95% confidence interval, or if 1 variable is above, 1 below, and 1 within the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Standard season \approx 94 days (Last Saturday in November and running through last day in February).

2. Initiate a restrictive season if 2 or more variables fall below the historic 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Restrictive season \approx 64 days (December 15 running through the third Saturday in February).

3. Initiate a liberal season if ≥ 2 variables are above the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Liberal season \approx 120 days (November 1 running through the last day in February).

4. During any period if the 3-year average of harvest falls below the low historical range (1989) AND the 3-year average of individuals reporting bobcat harvest drops below the low historical range (209), the season will default to the liberal season until either of these 2 variables increases to within the historical range. Then, the standard season prescriptions will be followed.

Historical 95% confidence limits

Variable	Mean	95% confidence interval
Kitten production (kittens/100 females)	66	57–75
Adult male to adult female ratio (males/ 100 females)	141	137–146
Harvest effort (trap nights/bobcat harvested)	171	159–183

NEVADA DEPARTMENT OF WILDLIFE

HARVEST MANAGEMENT GUIDELINES FOR HUNTING SEASONS

Initial Revised Draft

Draft August 12, 2016

TABLE OF CONTENTS

Schedule for formulating harvest management guidelines 3

Objective 4

Harvest management guideline approaches 4

Big game 6

Pronghorn antelope 6

Black bear 8

Bighorn sheep 8

Elk 9

Mountain goats 14

Mountain lion 14

Mule deer 15

Small game and fur-bearers 18

Greater sage-grouse 18

Wild turkey 19

Other small game 19

Fur-bearers 19

Bobcat 20

Initial Revised Draft

SCHEDULE FOR FORMULATING HARVEST MANAGEMENT GUIDELINES

Estimated Date	Harvest Guidelines Schedule	Responsibility
August 8, 2015	Introduce Harvest Management Guidelines to Commission	Game Division
September 25, 2015	Gather existing guidelines into a single document	Game Division
October 9, 2015	Gather comparative data from neighboring states	Game Division
October 16, 2015	Provide draft guidelines generally followed where none exist	Game Division
November 2–6, 2015	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Game Division
November 14, 2015	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
December 5, 2015	Develop revision of harvest management guidelines based on biological data and public opinion	Guidelines Team
January 15, 2016	Second review draft to guidelines committee	Game Division
January 22, 2016	Second review draft to agency	Game Division
January 29, 2016	Draft public survey instrument to seek input on specific questions that may develop	Guidelines Team
April 8, 2016	Summarize feedback from public survey	Guidelines Team
August 13, 2016	Provide Commission with informational update on status of harvest management guidelines	Commission
August 24–26, September 6–7, 2016	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Guidelines Team
September 23–24, 2016	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
October 30, 2016	Final revision to harvest management guidelines	Guidelines Team
November 18–19, 2016	Present to Commission for adoption	Commission

OBJECTIVE

Harvest management guidelines are designed to be used by Nevada Department of Wildlife (Department) Game Biologists when formulating hunt recommendations. Harvest management guidelines are intended to provide general guidance on the parameters for which hunted or trapped species are managed. Like hunt recommendations, harvest management guidelines are shared with the Nevada Board of Wildlife Commissioners (Commission) and County Advisory Boards to Manage Wildlife (CABs) before approval in public session following a regular review cycle described in the preceding pages.

The harvest management guidelines themselves are one piece of an overall planning approach used by the Commission and Department in managing wildlife. While harvest management guidelines describe the objectives to which the Department manages, other protocols describe how that data is collected. Management plans (e.g., species management plans and related sub-planning documents) describe landscape level objectives, opportunities for habitat enhancement, specific herd management objectives (e.g., increase population), and management challenges (e.g., persistent low fawn recruitment for pronghorn).

The Department also operates under a Commission-approved strategic plan that provides agency vision, an annual work plan developed under the Wildlife and Sport Fish Restoration (WSFR) Program, annual or biennial translocation plans approved by the Commission, and an annual implementation plan that ties together budgets, specific tasks, and work units for the upcoming year.

The Department manages Nevada's wildlife within the biological limits of each species. Management strategies are developed to address social perceptions, which are routinely more conservative than the limits at which wildlife may be biologically managed.

Ultimately, the Department manages wildlife in the public trust for all of Nevada's citizens. All game animals, from predators to big game, are managed as part of an important ecosystem to be sustained for future generations of Nevadans and our visitors to enjoy. These harvest management guidelines have been developed to meet a variety of hunting desires and strive to provide adequate opportunity for all, while maintaining a self-sustaining resource. The guidelines are based on the best available biological and social science. Nevada has a diverse wildlife resource, yet many of these resources are limited in supply. The following guidelines attempt to provide the diversity of experiences desired by the hunters of Nevada, while providing the necessary management so that everyone will benefit from diverse wildlife populations in the future.

HARVEST MANAGEMENT GUIDELINE APPROACHES

The Department and Commission will revisit the guideline package with the public every 4 years. The 4-year harvest guideline framework aligns with the following approaches:

- Obtain input from the Commission on hunt guideline concerns that were brought to their attention; use this input to guide public survey questions.
- Use CABs and public outreach avenues to ensure inclusion of affected and interested customers in guideline and hunt recommendation development.
- Commission Policy 24 provides direction to the Department in formulating hunting seasons and tag quotas.
- Seasons are recommended biennially, with recommendations from the Department of Wildlife to CABs and the Nevada Board of Wildlife Commissioners.
- Maintain consistent wildlife survey protocol and interpretation to develop hunt recommendations across the state in accordance with other pertinent management plans (e.g., species management plans and annual work plans). Population management objectives (including male to female ratios, harvest rate, or other

parameters by which we manage populations) for specific units may be described within these pertinent species management plans.

- Provide hunt structures across the state consistent with Commission policy and statewide species plans. Simplify hunt regulations and restrictions related to the hunt structure. Standardized and simplified hunt structures should not obstruct diversity of hunting opportunities.
- Provide for a diversity of hunter opportunity while maintaining wildlife population health. Guidelines for this approach are:
 - Limit hunting seasons when the legal animals are most vulnerable (e.g., breeding period) except to provide alternative or late hunting seasons in some management areas.
 - Allocate hunt tag quotas with respect to weapon type demand per Commission Policy 24.
 - Use innovative management hunts to address specific management objectives that are not being achieved through standard hunt structures.
 - Use split hunt structure to reduce user conflicts and hunter densities.
 - Use targeted harvest by hunters to address human-wildlife conflicts when appropriate.
 - Reserve about 10% hunting tag quotas for nonresident hunters in limited entry hunts.
- Emphasize youth and new big game hunter opportunities when possible. In doing so, provide diverse and dispersed hunt opportunities to allow equitable tag availability and limited conflict with other uses.
- Emphasize small game, predator-furbearer, and other wildlife hunt opportunities. Guidelines for this approach are:
 - Liberalize bag and possession limits as well as season lengths within sustainable biological means to encourage hunter participation.
 - Maintain consistent season opener and structure to reduce hunter confusion among years.

BIG GAME

BIOLOGICAL FRAMEWORK

The Department conducts annual or biennial surveys to determine composition (i.e., sex and age) of ungulate populations. Data collected during those surveys are subsequently incorporated into deterministic population models to derive population estimates. These population estimates are used by the Department to assess male to female ratios, recruitment, population trends, and ultimately provide the starting point for determining the amount of harvestable surplus available from each population.

Harvest is an important tool for managing populations of wild ungulates. Although male to female ratios in wild ungulates bear little effect on population productivity, it is a substantial consideration for the Department when assessing tag quotas. Indeed, ratios in wild ungulates can vary from 10–50 males per 100 females without a noticeable effect on juvenile recruitment. The variation in male to female ratios can, however, have a noticeable effect on hunter satisfaction, hunt quality, and harvest success. Managing populations toward the lower end of the male to female ratio would allow more hunters to participate in a hunt (i.e., chance to draw a tag more frequently) and result in a fewer older age class males in the ungulate population, whereas managing at the upper end of the ratio provides fewer hunters with the ability to participate in a hunt (i.e., chance to draw a tag every 3–4 years) while yielding higher hunt success for those that draw a tag with an older age structure in the ungulate population. The Department has set management objectives at the mid-to-upper point of the biologically sustainable male to female ratio for all wild ungulates. The Department may recommend a quota reduction when the recorded male to female ratio is below objectives and may recommend a quota increase when the recorded male to female ratio is above objectives.

In contrast to male to female ratios, the juvenile to female ratio directly influences population productivity. The Department assesses current and historical juvenile to female ratios to determine population trends because of its correlation with recruitment of new individuals into the breeding population. In general, a ratio above 30–40 juveniles per 100 females suggests a stable or increasing population, while a ratio below 30–40 juveniles per 100 females suggests a declining population and is characteristic of a population at or near carrying capacity. In most cases, the Department manages for stable or increasing populations and may recommend an increase in the quota if the juvenile to female ratio is above the sustainability threshold. When the juvenile to female ratio is low, the Department may recommend a decrease in the male quota and the inclusion of a female hunt or an increase in the female quota.

PRONGHORN ANTELOPE

The Department's Pronghorn Antelope Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

Current harvest objectives for pronghorn antelope are set forth in the Department's pronghorn antelope management plan: *Nevada's Pronghorn Antelope, Ecology, Management, And Conservation (2003)* and subsequent Commission action: *Nevada Board of Wildlife Commissioners Policy for the Management of Pronghorn Antelope (2003)*.

Season prescriptions:

1. Pronghorn antelope hunts may be authorized for either "horns-longer-than-ears" (buck) or "horns-shorter-than-ears" (doe).
2. Hunts for horns-longer-than-ears pronghorn antelope involve the following weapon classes: "any legal weapon," "muzzleloader," and "archery" seasons. These seasons generally occur on standard opening dates within the state. In limited cases, seasons are split to reduce hunter densities or more effectively target harvest timing.

3. Where they occur, standard hunts for horns-shorter-than-ears pronghorn antelope are limited to “any legal weapon” seasons.

Horns-longer-than-ears archery	
Standard Season	August 1–September 17

Horns-longer-than-ears muzzleloader	
Standard Season	August 18–25

Horns-longer-than-ears any legal weapon	
Standard Season	August 26–September 7
Late Season	September 25–October 4

Horns-shorter-than-ears any legal weapon	
Standard Season	September 8–20

Harvest management and tag quota prescriptions:

- A. Annual composition survey data are used in computer population models to assist Game Biologists in estimating the pre-hunt adult population size. A representative sample of each herd is observed through aerial or ground surveys to determine age (young to adult) and sex (male to female) ratios. These pre-hunt adult population estimates and male to female ratios used are for determining quotas targeting desired post-hunt buck to doe ratio objectives, demand by weapon class, and hunter success rates.

Harvest levels for horns-longer-than-ears (buck) pronghorn are based on a desired post-season buck ratio objective of 20–30 adult (≥ 2 year old) bucks per 100 does. The target buck to doe ratio is based on adult bucks because many yearling bucks have horns lengths that would make them unlawful for harvest.

Standard units	
Buck to doe ratio objective	25 bucks to 100 does
Applicable hunt units	All open units

- B. Harvest levels for horns-shorter-than-ears pronghorn are determined on a hunt unit basis to allow for herd population management and to provide additional and desired hunting opportunities to harvest pronghorn does. Doe harvest criteria are based on specific criteria to the individual herd.

Doe harvest is typically managed within the range of 0–20% of the total adult doe population. Harvest rates may fall outside this range in the case of catastrophic environmental events or other unique situations.

Pre-hunt adult doe estimate	Pre-hunt buck ratio estimate	Observed fawn ratio	Desired harvest rate
0–300	>30	3-year stable or increasing	0–10%
300–500	>30	3-year stable or increasing	0–20%
>500	>30	3-year stable or increasing	5–20%

In some instances, fawn to doe ratios may decline when the population approaches the capacity of the habitat, and in those instances doe harvest may be needed to maintain healthy populations.

Private land issues

Issues involving private land depredation are managed in accordance with NAC 502.424. Emergency depredation hunts may be employed.

BLACK BEAR

The Department's Bear Management Goal is to manage black bear population numbers and distribution as an important part of Nevada's fauna, while providing hunting and other related recreational opportunities. The hunt recommendation goal is to allow bear hunting harvest, while managing for representation of older age cohorts of both sexes in the population.

Season prescriptions:

1. Black bear hunts may be authorized for "either sex" seasons, except that cubs or a sow accompanied by cubs may not be taken.
2. Hunts for either sex black bear "any legal weapon" seasons will occur on standard opening dates.

Any legal weapon seasons may begin on September 15 and run through December 31

Harvest management and tag quota prescriptions:

- A. Game Biologists will manage black bear harvest toward moderate harvest, while considering modeled population trends.
- B. Tags and harvest limits may be adjusted to maintain light or moderate harvests. The most recent 3-year mean or trend should receive greater emphasis when determining permit levels; emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Parameter	Light harvest	Moderate harvest	Heavy harvest
Percent females in harvest	<30%	30–40%	>40%
Percent adult females within female harvest	>55%	45–55%	<45%
Mean age of harvested males	>4 years	2–4 years	<2 years

BIGHORN SHEEP

As stated in the statewide Bighorn Sheep Management Plan, the Department's goals are to restore and maintain bighorn sheep herds at optimal population levels, provide diverse recreational opportunities, recognize hunting is a legitimate and desirable use of the bighorn sheep resource, strongly advocate habitats be maintained in good ecological condition, and reduce and manage risk of disease transmission.

Season prescriptions:

1. Units will be the primary geographic basis for managing bighorn harvest. Units may be subdivided to more optimally spread hunting pressure and harvest to all known areas of bighorn distribution during the hunting season.

2. All hunts are "any legal weapon" seasons.
3. Standard California and Rocky Mountain bighorn ram seasons will run September 1 through October 30, whereas most desert (Nelson) bighorn sheep seasons will run November 20 through December 20. Split or extended seasons may be implemented if hunter crowding and hunt efficacy becomes an issue. Standard season length will not be less than 21 days. For hunts involving Department of Defense lands, the north range season will start on the Saturday closest to Nov 20 and run for 23 days, and the south range season will begin on the third Saturday in December and run for 16 days.
4. Bighorn ewe seasons will be no shorter than 21 days and will occur on dates that do not overlap with bighorn ram seasons in same unit. Other considerations are to reduce overlap with mule deer rifle seasons in same unit and to accommodate optimal timing of bighorn sheep captures for management and disease surveillance.

Harvest management and target quota prescriptions:

- A. Ram tag numbers will be recommended at 8% of total estimated rams, not to exceed 50% of the estimated Class III and IV rams (i.e., rams ≥ 6 years of age) derived from a reconstructive deterministic population model for each herd based on aerial survey data (primarily recruitment), best available survival rates, and estimated ingress-egress. These criteria are expected to obtain a 3-year average age of harvested rams of 6 years or older within each unit.
- B. Criteria for establishing ewe hunts and tag numbers will be based on maintaining herd size at or below established sustainable management levels (SML) for herds of concern with seasonal or yearlong habitat resource limitations, past cyclical declines associated with record high SML, or proximity to known disease risk. Opportunities for removal of source stock animals for low risk translocations will be considered prior to recommending ewe harvest.

ELK

The Department's Elk Management Goal is to maintain elk populations to meet population objectives, while providing recreational opportunities and avoiding adverse impacts to the species, its habitat, and reducing land use conflicts. The Commission has adopted various local sub-plans, which provide broad and specific management goals for elk in Nevada and identify additional objectives specific to those areas.

Harvest objectives for elk are set forth in the Department's *Nevada Elk Species Management Plan (1997)* and 10 subordinate sub-plans: *Bruneau River Watershed Environmental Analysis (1994)*; *Wells Resource Management Plan, Elk Amendment and Decision Record (1995)*; *Environmental Assessment for the Release of Elk into the Jarbidge Mountains, Nevada (1997)*; *NDOW Decision For Lands Outside of Wells RMP Elk Amendment Subplan; Central Nevada Elk Plan (2004)*; *Conservation Agreement for the Spring Mountain National Recreation Area (1998)*; *the White Pine County Elk Plan (1999)*; *Lincoln County Elk Management Plan (2003)*; *the Western Elko County Elk Management Plan (2003)*, and *the Humboldt County Elk Management Sub-Plan (2016)*.

Season prescriptions:

Because of high population growth rates observed in most elk herds and conservative population objectives identified in elk sub-plans, the need to increase harvest on elk to reduce both population size and growth rates has required aggressive hunt structures to maximize the harvest of antlerless elk. These aggressive season structures and quotas are designed to meet the population objectives and minimize conflicts with other hunts. Standardized season dates are implemented when practical. Population objectives identified in local sub-plans, however, may supersede the implementation of a standardized season. Elk hunts are currently authorized for "antlered elk" (i.e., bull), "spike-only elk," or "antlerless elk" (i.e., cow).

1. Antlered elk hunts, which consist of "any legal weapon," "muzzleloader," and "archery" seasons, may have varied dates among units to reduce overlap with concurrent hunt seasons for other species. In some units a

multiple any-legal-weapon split-season (i.e., early-late) structure has been employed to reduce hunter densities, increase hunt quality, and more effectively achieve desired harvest objectives.

Any Legal Weapon – Antlered Elk		
Management Areas		Dates
6, 7, 12, and 13	Early	October 22–November 5
	Late	Nov. 6 Nov. 20

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26	Early	November 6–20
	Late	November 21–December 4

Unit Group		Dates
078, 105–107, and 109	Early	October 22–November 5
	Late	November 6–28

Hunt Units		Dates
051 and 065		September 17–30

Muzzleloader - Antlered Elk		
Management Areas		Dates
6, 7, 12, and 13		September 1–16

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26		October 22–November 5

Unit Group		Dates
078, 105–107, and 109		October 5–21

Archery - Antlered Elk		
Management Areas		Dates
6, 7, 12, & 13		August 16–31

Management Areas		Dates
11, 16, 17, 22, 23, 24, & 26		August 25–September 16

Unit Group		Dates

078, 105–107, 109	September 1–20
-------------------	----------------

2. Spike Elk Hunts are established in identified hunt units to reduce the hunting pressure and harvest of mature bulls, while still managing population and harvest objectives. Spike elk hunts will run concurrent with Antlerless Elk seasons since the majority of spike elk occur in cow-calf elk groups.
3. Hunts for antlerless elk, which consist of "any legal weapon," "muzzleloader," and "archery" seasons, vary start and end dates in an attempt to reduce overlap with concurrent seasons. Antlerless elk hunts are used where the elk population requires reduction or stabilization (i.e., above population objective). Where populations are above local sub-plan population objectives, a more aggressive harvest strategy is implemented to bring populations closer to objective. In some units, a multiple any legal weapon split-season structure has been implemented to reduce hunter densities, increase hunt quality, and more effectively achieve harvest objectives.

Any Legal Weapon – Antlerless or spike elk		
Management Areas		Dates
6, 7, 12, and 13	Early	September 17–October 4
	Late	November 21–January 15

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26	Early	September 25–October 9
	Late	December 5–January 15

Unit Group		Dates
078, 105–107, and 109		September 21–October 5

Muzzleloader – Antlerless Elk		
Management Areas		Dates
6, 7, 12, and 13		September 1–16

Management Areas		Dates
11, 16, 17, 22, 23, 24, and 26		September 17–24

Unit Group		Dates
078, 105–107, and 109		August 16–31

Archery - Antlerless Elk - 4111
--

Management Areas		
6, 7, 12, and 13		August 1–15
Management Areas		
11, 16, 17, 22, 23, 24, and 26		August 1–24
Unit Group		
078, 105–107, and 109		August 1–15

In areas where substantial antlerless harvest is desired and where hunter congestion may be an issue, "antlerless elk combination" hunts may be implemented by issuing an antlerless elk tag to tagholders who are successful in drawing for a mule deer tag for a given weapon class in a hunt unit or unit group where substantial overlap between elk and deer herds occur. This hunt strategy provides an additional option to meet cow elk harvest objectives while reducing the potential for hunter congestion.

Depredation hunts may be implemented in management areas and units with no existing sub-plan, in areas designated as "elk restricted" areas, or to address existing or potential private land conflicts. Depredation hunts are used to liberalize tag quotas and relax eligibility requirements to facilitate the most effective harvest possible. These seasons may be structured to begin and end at any time to best meet the management objectives of the local herd.

Antlerless elk landowner hunts may be implemented to specifically target offending elk on private lands where conflicts occur.

4. Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife-habitat conservation and enhancement, and provide incentives for landowners whose private rangelands are used by elk.

Specialty Elk Hunts	
Hunt	Hunt Dates
PIW Resident Elk Antlered Any Legal Weapon	Standard dates for hunts 4151, 4161, 4156
Heritage Elk Any Legal Weapon	July 1 – February 29 in any open elk unit
Silver State Elk Any Legal Weapon – 4300	July 1 – February 29 in any open elk unit
Dream Elk Any Legal Weapon – 4500	Standard dates for hunts 4151, 4161, 4156
Elk Incentive Any Legal Weapon Hunt – 4131 & 4231	Standard dates for hunt 4151
Elk Incentive Muzzleloader Hunt – 4133 & 4233	Standard dates for hunt 4156
Elk Incentive Archery Hunt – 4132 & 4232	Standard dates for hunt 4161

Harvest management and tag quota prescriptions:

- A. Percentage of main beams ≥ 50 inches in the antlered harvest will be used to determine desired antlered elk tag quotas. Data collected from hunter return questionnaires and cementum annuli from tooth submissions indicates a strong relationship between main beam length and age. The length of the main beam of most antlered elk aged ≥ 8 years is reported to be ≥ 50 inches. If the reported percentage falls within the desired range, no change will be made to antlered elk tag quotas. If the reported percentage falls outside of the desired range, antlered elk tag quotas will be adjusted accordingly. Additionally, spike elk harvest is not to exceed 15% of the total antlered harvest.

Standard	
Main beam length \geq 50 inches	25–35% of bull harvest
Optional spike harvest	\leq 15% of bull harvest
Hunt units	All units except: 051, 061–071, 065, 075, 078, 091, 101–103, 111–115, 144–145, 241–242, and 262

Alternative	
Main beam length \geq 50 inches	35–45% of bull harvest
Optional Spike Harvest	\leq 15% of bull harvest
Hunt units (Not to exceed 4 unit groups)	Units: 078, 091, 111–115

Non-Standard	
Modeled bull to cow ratio	Supports harvestable surplus
Harvest success	Stable
Hunt units	Units: 051, 061–071, 065, 075, 241–242, and 262

Depredation	
Hunt units	Units: 101–103, and 144–145

- B. For antlerless elk in areas where sub-plans exist, quota recommendations are based on specific population management objectives. These objectives may be used to reduce, stabilize, or encourage growth of elk populations. In circumstances where populations are below objective, cow harvest may be designed to slow growth rates while still allowing herds to increase towards population objectives. In areas where no sub-plan currently exists, quota recommendations are based on providing hunting harvest, reducing conflicts (real or perceived) with other resource users, controlling population growth and expansion, or reducing private land depredation issues.
- C. Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife conservation, and provide incentives for landowners whose private rangelands are used by elk. Quotas for PIW, Heritage, Silver State and Dream hunts are generally very limited due to the unique nature of the hunts. Quotas for elk incentive hunts are calculated by use days of elk on private lands, as identified in NAC 502.42279.

MOUNTAIN GOATS

The Department's Mountain Goat Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

- Units may be subdivided into smaller hunt units to prevent hunters concentrating in specific areas within mountain ranges or to encourage hunting within areas with available rams that may be avoided because of access difficulty.
- All hunts will be "any legal weapon" seasons.

3. Mountain goat seasons for "any mountain goat" will begin and end on standard season dates, running September 1 through October 30.

Harvest management and tag quota prescriptions:

- A. Hunt recommendations should be developed using estimated populations based on survey protocols and sighting rates described in scientific literature. When a clear trend in population parameters exists, emphasize the most recent year's data. When no clear trend exists, emphasize 3-year mean data.
- B. Harvest will be managed to allow for the take of 2–5% of the total population. Game Biologists will manage mountain goats within the guideline range.

MOUNTAIN LION

The Department's Lion Management Goal is to manage the mountain lion population, its numbers, and distribution, as an important part of Nevada's fauna while providing mountain lion hunting and other recreational opportunities.

The Department will establish a statewide harvest objective and monitor harvest within 6 management zones. These zones correspond to the genetic subpopulations identified in recent research within Nevada. Five zones correspond with 5 unique genetic subpopulations identified by Andreasen et al. (2012). Transient units are defined by NDOW.

Management zones:

1. Central units include 142,143, 144, 145, 155, 161, 162, 163, 171, 172, 183, 184, 251,
2. East units include 102, 103, 104, 105, 106, 108, 109, 111, 112, 113, 114, 115, 121, 231,
3. North units include 44, 45, 46, 51, 61, 62, 64, 65, 66, 67, 68, 71, 72, 73, 74, 75, 76, 77, 78, 79, 81, 91, 101, 107, 141, 151, 152, 153, 154, 156,
4. West units include 011, 012, 013, 014, 015, 021, 022, 032, 033, 034, 041, 192, 194, 195, 196, 201, 202, 203, 204, 206, 291,
5. South units include 131, 132, 133, 134, 164, 221, 222, 223, 241, 242, 243, 244, 245, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 271, 272, 280, 281, 282, 283, 284, 286,
6. Transient units include 031, 035, 042, 043, 181, 182, 205, 207, 208, 211, 212, 213, 252, and
7. Units closed to hunting include 033, 269, 280, 281, 282, 283, 284, 286. which are closed by other administrative regulations imposed by the Department of Defense, US Fish and Wildlife Service, or similar restriction.

Season prescriptions:

1. Hunts for either sex mountain lion "any legal weapon" seasons will occur on March 1 and run until the last day of February of the subsequent year.
2. Mountain lion hunts may be authorized for "either sex" seasons, except that spotted kittens or females accompanied by spotted kittens may not be taken.
3. The limit is one animal per tag, 2 tag maximum per person per year.
4. Hunting hours are any time of the day or night.

Harvest management and objective prescriptions:

- A. The number of total and adult female mountain lions removed from each unit will be monitored annually. A premolar will be removed from each harvested mountain lion during the mandatory check procedures. Premolars will be sectioned and age will be determined using cementum aging techniques. If the 3-year mean percentage of adult (≥ 3 year old) female in the harvest within any specific management zone exceeds 35%, the Department will establish a separate harvest objective for that zone to limit harvest (see Anderson and Lindzey 2005).
- B. Harvest objectives within a specific management zone may be increased or combined with the statewide harvest objective following 2 consecutive seasons in which the 3-year mean of adult females in the harvest is $\leq 35\%$ of the total harvest.

MULE DEER

The Department's mule deer management goal is to maintain and enhance deer populations to levels that provide maximum and diverse recreational opportunities, while avoiding adverse effects to the species and its habitat. Harvest objectives for mule deer generally follow the *Nevada Management Plan for Mule Deer* which can be found on the state of Nevada website.

Season prescriptions:

Generally, hunting seasons are for "antlered mule deer" or "antlerless mule deer." "Either sex" tags are issued to junior hunters in accordance with NAC 502.063. "Antlerless mule deer" hunts are used when deer populations require reduction or stabilization and to provide hunter harvest. Antlered mule deer hunts are used to manage the ratio of males to females in the population while maintaining a healthy deer herd.

Hunts for antlered mule deer typically follow a progression from late summer (archery), mid-autumn (muzzleloader) to late autumn months (any legal weapon). Seasons may be split to reduce hunter crowding or more effectively target the timing of harvest. Any legal weapon hunts during the early seasons provide greater opportunity to draw a tag and are primarily designed to achieve management objectives, whereas late seasons provide more opportunities to harvest an older age class buck. Antlerless deer seasons are structured to meet the management objectives of the local herd while still considering antlered hunting seasons and timing of annual surveys as the top priorities.

Junior "either sex" seasons coincide with the any legal weapon season for standard mule deer hunts, the muzzleloader season, and the archery season dates for the unit or unit groups in which the hunt is adopted. Junior hunts that coincide with standard and early-late split seasons for the any legal weapon class will begin on October 5 and end on the Sunday following Nevada Day.

Archery	
Standard Early Seasons	August 10–September 9
Late seasons in Area 7, Area 10, Area 12, and Unit 081	November 10–20
Late seasons in Area 19, Area 20, and Units 015, 021	December 1–10

Muzzleloader	
Standard Seasons	September 10– October 4
Unit 181–184	November 10–30
Units 015, 021, Area 20	December 11–20
Unit 081	November 21–December 10

Any Legal Weapon	
Standard (Single Seasons)	October 5–31
Early-Late Split Season	October 5–24
	October 25–November 5
<i>Exceptions</i>	
Units 015, 021	December 21–January 1
Unit 081	December 11–January 1

Antlerless	
Standard Early Season	October 10–31
Standard Late Season	November 6–20
<i>Exceptions</i>	
Units 101, 102, 109	October 5–20
Units 071-079, 091	October 15–30

Antlered mule deer objectives

For standard hunt units, the Department manages toward 30 bucks per 100 does to provide a good experience for hunters that are drawn. The Department also manages some units as "alternative" management areas with higher buck ratios, lower hunter density, and older-age-class animals in the harvest. Alternative management areas are managed for 35 bucks per 100 does in no more than 8 hunt units throughout the state. In addition to buck ratio objectives, the Department will consider average age (adult bucks), hunter success rate, and percentage of 4 point or greater when setting appropriate quotas for alternative management areas. The Department will make quota recommendations based on a 3-year trend in management criteria to account for annual environmental variation. When a clear trend does not exist or if two of the four criteria are not met, then the Department will recommend no change to the quota allocation from the previous year.

Harvest objectives and criteria for management of antlered mule deer include:

Standard Hunts	
Buck ratio objective (post season)	30 bucks to 100 does
Hunt units	Western Region: 011–013, 022, 031, 032, 033, 034, 035, 043–046, 051, 181–184
	Eastern Region: 061–068, 071–079, 091, 101–109, 111–113, 121, 141–145, 151–156
	Southern Region: 161–164, 171–173, 231

Alternative hunts (no more than 8 unit groups statewide)	
Buck ratio objective (post season)	≥35 bucks to 100 does
Hunter success objective	40–55% Success
Percent of harvested bucks with ≤4 points	50–75%
Mean age of harvested bucks ≥5 years old	50–75%
Hunt units	Western Region: 014, 194–196
	Eastern Region: 065, 081, 114–115, 131–134
	Southern Region: 221–223, 241–245

Non-standard Hunts	
Management Strategy A	
Hunter success objective:	≥45% success
Hunt units	192, 201–208, 291, 041–042;, 261–268, 271–272
Management Strategy B	
Hunter success objective	35–45% success
Hunt units	015, 021, 195; 211–213, 251–254

Antlerless mule deer harvest objectives

Antlerless mule deer harvests are used to manage mule deer population size, growth, and to provide hunter harvest in some instances. Recommendations on when to implement an antlerless harvest are based on an overall assessment of the carrying capacity, trends in fawn to doe ratios, body condition of deer either captured or harvested, or a combination of the above factors. Antlerless mule deer hunts would not be recommended in units that have total adult populations <2,000 individuals. In units ≥2,000 individuals, fawn to doe ratios obtained during spring surveys or modeled or measured survival of fawns and does will be used to guide Game Biologists to a range of harvest strategy options. Catastrophic environmental events will be considered when recommending doe quotas and could initiate harvests beyond those described in guidelines.

Harvest rate objectives for mule deer populations greater than 2,000 individuals, relative to population trend.

Fawn to 100 does ^a	<30	30–39	>40
Population Trend	Decreasing	Stable	Increasing
Harvest Rate ^b	0–10%	2–6%	2–10%

^a Where possible, a 3-year mean of observed spring fawn to doe ratios would be used, a modeled spring fawn ratio may be considered when 3 years of observed data are not available

^b Harvest rate will be determined as the percentage of the modeled adult female population

Restricted nonresident deer hunts

"Restricted nonresident deer hunts" are designed to provide nonresident hunters an opportunity to hunt with a licensed Nevada guide for mule deer. These tags are drawn in a separate drawing before the main draw for big game and nonresidents must be accompanied by licensed master guide at all times. Any legal weapons may be used during these hunts. Seasons for restricted nonresident deer tags coincide with any legal weapon deer hunts and are issued according to NRS 502.147. Nonresident applicants who apply in the restricted nonresident guided deer hunt are not eligible to apply for deer tags in the big game main draw in the same year.

Landowner compensation tags for mule deer

An owner, lessee, or manager of private land in this state may apply to the Department for the issuance of deer tags for compensation of these animals using their private lands. These tags can be used by the owner, lessee, or manager if he holds a valid Nevada hunting license or the tags can be sold to any holder of a valid Nevada hunting license at any price mutually agreed upon. Landowners, lessees, or managers of private land will be awarded 1 tag for every 50 mule deer present on the property as compensation for damage to private land as per regulation NRS 502.145 and NAC 502.424.

SMALL GAME AND FUR-BEARERS

The Department's Upland Game Management goal is to provide as much upland game hunting as possible. Seasons will be designed to allow standardization and simplification of hunt regulations, better distribution of hunters, and the opportunity to hunt more than 1 species at the same time.

GREATER SAGE-GROUSE

1. Hunting seasons for sage-grouse should be based on careful assessments of population size and trends.
2. If populations occur over relatively large geographic areas and are stable to increasing, seasons and bag limits can be relatively liberal (2- to 4-bird daily bag limit and a 2- to 5-week season) for hunting seasons allowing firearms.
3. If populations are declining (for 3 or more consecutive years) or trends are unknown, seasons and bag limits should be generally conservative (1- or 2-bird daily bag limit and a 1-to 4-week season) for hunting seasons allowing firearms, or suspended (for all types of hunting, including falconry and Native American subsistence hunting) because of this species' population characteristics.
4. Where populations are hunted, harvest rates should be $\leq 10\%$ of the estimated fall population to reduce negative effects on the subsequent year's breeding population.
5. Populations should not be hunted where < 300 birds comprise the breeding population (i.e., < 100 males are counted on leks).

WILD TURKEY

1. Wild turkey spring seasons will be for "bearded turkey" only.
2. Wild turkey fall season may be for "any" turkey.
3. Spring seasons will be established to begin on the fourth Saturday in March and extend through the first Sunday in May. Season dates may be adjusted or split to avoid hunter crowding or conflicting land uses.
4. Hunting hours will be from sunrise to sunset daily for both spring and proposed fall turkey seasons.
5. Fall seasons may be established if population size, access, and hunter densities may be adequately addressed.

OTHER SMALL GAME

1. Upland game seasons will be open statewide when feasible.
 - California, Gambel's, and mountain quail, and chukar and Hungarian partridge season will open on the second Saturday in October and run through the first Sunday in February unless population size and distribution dictates otherwise.
 - Blue (dusky and sooty) and ruffed grouse season will open on September 1 and run through December 31 unless population size and distribution dictates otherwise.
 - Cottontail and pygmy rabbits and white-tailed jackrabbit seasons will open on the second Saturday in October and run through February 28
 - Pheasant season will open on November 1 and run through November 30; seasons will allow for the harvest of "cocks" only
 - Snowcock seasons will open on September 1 and run through November 30
 - A two-day youth season for chuck and Hungarian partridge, California and Gambel's quail, cottontail and pygmy rabbits, and white-tailed jackrabbits will be held annually on the fourth Saturday and Sunday in September.
2. Migratory game bird seasons and bag limits will be set by the Commission annually according to Migratory Bird Treaty Act and Pacific Flyway guidelines.

FUR-BEARERS

The Department's fur-bearing mammal management objectives are to maintain present range, distribution, and population levels in Nevada; and to allow for the maximum recreational, economic and aesthetic uses commensurate with existing populations statewide. Fur-bearer seasons will be set for a 2-year time period. Seasons and season dates will be reviewed by the commission.

Season prescriptions:

Population estimates for some of the more common furbearer species (beaver, kit fox, gray fox) harvested in Nevada have been generated by using USGS GAP analysis data. GAP data uses maps that delineate topographical, biological, and geological features to identify various habitats. GAP data for each species is paired with habitat suitability models that specify known habitat requirements. This process provided the Department with maps indicating available statewide habitat for each of the species. The GAP data is then used in conjunction with biological density and home range data for each species to generate population estimates. Density and home range data were derived from research data either in Nevada, or in the absence of Nevada research, from nearby states (Utah and California) with similar habitat types. Population estimates and estimated harvest rates based on expanded trapper harvest data will be compared annually. If harvest of any of those species is estimated to be in excess of 10% of the estimated population, the Department will recommend restricting harvest.

BOBCAT

The Department's bobcat management objectives are to sustain a healthy bobcat population within existing suitable habitat and provide quality recreational opportunities for bobcat harvest. Bobcat seasons will be set for a 2-year time period.

Season prescriptions:

1. Maintain or return to the standard season strategy if at least 2 variables (3-year average) are within the historical 95% confidence interval, or if 1 variable is above, 1 below, and 1 within the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Standard season \approx 94 days (Last Saturday in November and running through last day in February).

2. Initiate a restrictive season if 2 or more variables fall below the historic 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Restrictive season \approx 64 days (December 15 running through the third Saturday in February).

3. Initiate a liberal season if ≥ 2 variables are above the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Liberal season \approx 120 days (November 1 running through the last day in February).

4. During any period if the 3-year average of harvest falls below the low historical range (1989) AND the 3-year average of individuals reporting bobcat harvest drops below the low historical range (209), the season will default to the liberal season until either of these 2 variables increases to within the historical range. Then, the standard season prescriptions will be followed.

Historical 95% confidence limits

Variable	Mean	95% confidence interval
Kitten production (kittens/100 females)	66	57–75
Adult male to adult female ratio (males/ 100 females)	141	137–146
Harvest effort (trap nights/bobcat harvested)	171	159–183

NEVADA DEPARTMENT OF WILDLIFE

HARVEST MANAGEMENT GUIDELINES FOR HUNTING SEASONS

Current Practices Review Draft Three

Draft August 11, 2016

TABLE OF CONTENTS

Schedule for formulating harvest management guidelines 3

Objective 4

Harvest management guideline approaches 4

Big game 6

Pronghorn antelope 6

Black bear 7

Bighorn sheep 8

Elk 8

Mountain goats 10

Mountain lion 11

Mule deer 11

Small game and fur-bearers 13

Greater sage-grouse 14

Wild turkey 14

Other small game 14

Fur-bearers 14

Bobcat 15

Current Practices Review Draft Three

SCHEDULE FOR FORMULATING HARVEST MANAGEMENT GUIDELINES

Estimated Date	Hunt Guidelines Schedule	Responsibility
August 8, 2015	Introduce Harvest Management Guidelines to Commission	Game Division
September 25, 2015	Gather existing guidelines into a single document	Game Division
October 9, 2015	Gather comparative data from neighboring states	Game Division
October 16, 2015	Provide draft guidelines generally followed where none exist	Game Division
November 2–6, 2015	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Game Division
November 14, 2015	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
December 5, 2015	Develop revision of harvest management guidelines based on biological data and public opinion	Guidelines Team
January 15, 2016	Second review draft to guidelines committee	Game Division
January 22, 2016	Second review draft to agency	Game Division
January 29, 2016	Draft public survey instrument to seek input on specific questions that may develop	Guidelines Team
April 8, 2016	Summarize feedback from public survey	Guidelines Team
April 11–29, 2016	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Guidelines Team
May 13, 2016	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
May 20, 2016	Complete summary of public comments	Guidelines Team
May 30, 2016	Final revision to harvest management guidelines	Guidelines Team
June 24, 2015	Present to Commission for adoption	Commission

OBJECTIVE

Harvest management guidelines are designed to be used by Nevada Department of Wildlife (Department) Game Biologists when formulating hunt recommendations. Harvest management guidelines are intended to provide general guidance on the parameters for which hunted or trapped species are managed. Like hunt recommendations, harvest management guidelines are shared with the Nevada Board of Wildlife Commissioners (Commission) and County Advisory Boards to Manage Wildlife (CABs) before approval in public session following a regular review cycle described in the preceding pages.

The harvest management guidelines themselves are one piece of an overall planning approach used by the Commission and Department in managing wildlife. While harvest management guidelines describe the objectives to which the Department manages, other protocols describe how that data is collected. Management plans (e.g., species management plans and related sub-planning documents) describe landscape level objectives, opportunities for habitat enhancement, specific herd management objectives (e.g., increase population), and management challenges (e.g., persistent low fawn recruitment for pronghorn).

The Department also operates under a Commission-approved strategic plan that provides agency vision, an annual work plan developed under the Wildlife and Sport Fish Restoration (WSFR) Program, annual or biennial translocation plans approved by the Commission, and an annual implementation plan that ties together budgets, specific tasks, and work units for the upcoming year.

The Department manages Nevada's wildlife within the biological limits of each species. Management strategies are developed to address social perceptions, which are routinely more conservative than the limits at which wildlife may be biologically managed.

Ultimately, the Department manages wildlife in the public trust for all of Nevada's citizens. All game animals, from predators to big game, are managed as part of an important ecosystem to be sustained for future generations of Nevadans and our visitors to enjoy. These harvest management guidelines have been developed to meet a variety of hunting desires and strive to provide adequate opportunity for all, while maintaining a self-sustaining resource. The guidelines are based on the best available biological and social science. Nevada has a diverse wildlife resource, yet many of these resources are limited in supply. The following guidelines attempt to provide the diversity of experiences desired by the hunters of Nevada, while providing the necessary management so that everyone will benefit from diverse wildlife populations in the future.

HARVEST MANAGEMENT GUIDELINE APPROACHES

The Department and Commission will revisit the guideline package with the public every 3 years. The 3-year hunt guideline framework aligns with the following approaches:

- Obtain input from the Commission on hunt guideline concerns that were brought to their attention; use this input to guide public survey questions.
- Use CABs and public outreach avenues to ensure inclusion of affected and interested customers in guideline and hunt recommendation development.
- Commission Policy 24 provides direction to the Department in formulating hunting seasons and tag quotas.
- Seasons are recommended biennially, with recommendations from the Department of Wildlife to CABs and the Nevada Board of Wildlife Commissioners.
- Maintain consistent wildlife survey protocol and interpretation to develop hunt recommendations across the state in accordance with other pertinent management plans (e.g., species management plans and annual work plans). Population management objectives (including male to female ratios, harvest rate, or other

parameters by which we manage populations) for specific units may be described within these pertinent species management plans.

- Provide hunt structures across the state consistent with Commission policy and statewide species plans. Simplify hunt regulations and restrictions related to the hunt structure. Standardized and simplified hunt structures should not obstruct diversity of hunting opportunities.
- Provide for a diversity of hunter opportunity while maintaining wildlife population health. Guidelines for this approach are:
 - Limit hunting seasons when the legal animals are most vulnerable (e.g., breeding period) except to provide alternative or late hunting seasons in some management areas.
 - Allocate hunt tag quotas with respect to weapon type demand per Commission Policy 24.
 - Use innovative management hunts to address specific management objectives that are not being achieved through standard hunt structures.
 - Use split hunt structure to reduce user conflicts and hunter densities.
 - Use targeted harvest by hunters to address human-wildlife conflicts when appropriate.
 - Reserve about 10% hunting tag quotas for nonresident hunters in limited entry hunts.
- Emphasize youth and new big game hunter opportunities when possible. In doing so, provide diverse and dispersed hunt opportunities to allow equitable tag availability and limited conflict with other uses.
- Emphasize small game, predator-furbearer, and other wildlife hunt opportunities. Guidelines for this approach are:
 - Liberalize bag and possession limits as well as season lengths within sustainable biological means to encourage hunter participation.
 - Maintain consistent season opener and structure to reduce hunter confusion among years.

BIG GAME

BIOLOGICAL FRAMEWORK

The Department conducts annual or biennial surveys to determine composition (i.e., sex and age) of ungulate populations. Data collected during those surveys are subsequently incorporated into deterministic population models to derive population estimates. These population estimates are used by the Department to assess male: female ratios, recruitment, population trends, and ultimately provide the starting point for determining the amount of harvestable surplus available from each population.

Harvest is an important tool for managing populations of wild ungulates. Although male: female ratios in wild ungulates bear little effect on population productivity, it is a substantial consideration for the Department when assessing tag quotas. Indeed, ratios in wild ungulates can vary from 10–50 males per 100 females without a noticeable effect on juvenile recruitment. The variation in male: female ratios can, however, have a noticeable effect on hunter satisfaction, hunt quality, and harvest success. Managing populations toward the lower end of the male: female ratio would allow more hunters to participate in a hunt (i.e., chance to draw a tag more frequently) and result in a fewer older age class males in the ungulate population, whereas managing at the upper end of the ratio provides fewer hunters with the ability to participate in a hunt (i.e., chance to draw a tag every 3-4 years) while yielding higher hunt success for those that draw a tag with an older age structure in the ungulate population. The Department has set management objectives at the mid-to-upper point of the biologically sustainable male: female ratio for all wild ungulates. The Department may recommend a quota reduction when the recorded male: female ratio is below objectives and may recommend a quota increase when the recorded male: female ratio is above objectives.

In contrast to male: female ratios, the juvenile: female ratio directly influences population productivity. The Department assesses current and historical juvenile: female ratios to determine population trends because of its correlation with recruitment of new individuals into the breeding population. In general, a ratio above 30-40 juveniles per 100 females suggests a stable or increasing population, while a ratio below 30-40 juveniles per 100 females suggests a declining population and is characteristic of a population at or near carrying capacity. In most cases, the Department manages for stable or increasing populations and may recommend an increase in the quota if the juvenile: female ratio is above the sustainability threshold. When the juvenile: female ratio is low, the Department may recommend a decrease in the male quota and the inclusion of a female hunt or an increase in the female quota.

PRONGHORN ANTELOPE

The Department's Pronghorn Antelope Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

Current harvest objectives for pronghorn antelope are set forth in the Department's pronghorn antelope management plan: *Nevada's Pronghorn Antelope, Ecology, Management, And Conservation (2003)* and subsequent Commission Policy: *Nevada Board of Wildlife Commissioners Policy for the Management of Pronghorn Antelope (2003)*.

Season prescriptions:

1. Pronghorn antelope hunts may be authorized for either "horns-longer-than-ears" or "horns-shorter-than-ears."
2. Hunts for horns-longer-than-ears (buck) pronghorn antelope "any legal weapon," "muzzleloader," and "archery" seasons generally occur on standard opening dates within the state. In limited cases, seasons are split to reduce hunter densities or more effectively target harvest timing.
 - a. Currently, seasons exist for three weapon classes for horns-longer-than-ears antelope: archery, muzzleloader, and any legal weapon.
 - b. General season structures for these weapon classes are as follows:

- i. Archery seasons begin in August 1 and run for up to 20 days.
 - ii. Muzzleloader seasons begin September 25 and run for 11 days.
 - iii. Any legal weapon seasons typically begin August 22 and run for up to 16 days; however, seasons which begin on October 15 and run for 16 days are also employed.
 - A. When Any Legal Weapon split seasons are implemented, the first season typically begins August 22 and runs for 7 days, followed by a second any legal weapon season that typically begins August 29 and runs for 10 days.
3. Where they occur, hunts for horns-shorter-than-ears (doe) pronghorn antelope are limited to "any legal weapon" seasons which typically occur on standard opening dates, except under special circumstances such as depredation-type hunts.
 - a. Any legal weapon seasons typically begin September 8 and run for up to 14 days.

Harvest management and tag quota prescriptions:

- A. Annual composition survey data are used in computer population models to assist Game Biologists in estimating the pre-hunt adult population size and sex composition of a herd. Population trends are inferred from direct observation rates obtained during annual composition surveys. These pre-hunt adult population estimates, and male: female ratios, are the essential starting point of the Demand-Success-Quota Array process for calculating quotas, and along with desired post-hunt buck ratio objectives, are ultimately the driving factors for quota recommendations.
- B. For horns-longer-than-ears, the differential between the estimated pre-hunt buck: doe ratio, derived from the modeled population estimate, and the desired post-hunt buck: doe ratio, along with an anticipated (using the previous three-year average) hunter success rate and hunt demand, determine the recommended horns-longer-than-ears quota by the Department for a given unit and weapon class.
 1. Current policy and the species management plan referenced above identify a desired post-hunt buck ratio objective range of 20–30 bucks: 100 does.
- C. Harvest levels for horns-shorter-than-ears (female) pronghorn antelope are currently determined on a hunt unit basis as needed and no formal objectives currently exist.
 1. Where female harvest is currently employed, a harvest rate range of 2–18% of the total adult doe population is used.

Horns-longer-than-ears pronghorn antelope harvest objectives

Hunter success, demand by weapon class, total population size, hunt unit size, habitat conditions, fawn recruitment, mature buck ratio, and yearling buck ratio are all considered when identifying a post-season buck: doe ratio objective for a given hunt unit. Because a substantial portion of the pre-hunt adult buck population estimate includes yearling bucks whose horns do not extend beyond their ears and may not be harvested lawfully, in some cases harvest management recommendations targeted a more conservative post-hunt buck ratio objective. This results in post-hunt buck: doe ratios that may exceed the upper end of the guideline range.

Currently, about 50% of the 31 pronghorn antelope horns-longer-than-ears hunts fall within the guideline range of 20–30 bucks: 100 does. Of these, most fall within the upper end of this range. Of those outside of the guideline range for post-season buck ratio objectives, the majority fall between 31–40 bucks: 100 does; however, some outliers of about 55 bucks: 100 does occur. Deviations from the guideline range occur for a variety of reasons including: social outcomes of the public (Commission-CAB) process, percentage of yearling bucks in the population, and when portions of the harvestable population are inaccessible to hunters.

Horns-shorter-than-ears pronghorn antelope harvest objectives

Recommendations for implementing a horns-shorter-than-ears harvest are based on an overall assessment of the population in proximity to the range carrying capacity, competition with other users for limited resources, private land depredation issues, sustainable hunter harvest, and total population size. The level of desired doe harvest is determined by the desired population response (i.e., decrease or stabilize population growth). Where horns-shorter-than-ears pronghorn antelope hunts occur, the harvest rates employed range from 2–18% of the total pre-hunt doe population estimate. Quotas are determined using the desired level of harvest of the total adult doe population and then multiplying that number by the 3-year average hunter success rate.

Private land issues

Issues involving private land depredation are managed in accordance with NAC 502.424.

BLACK BEAR

The Department's Bear Management Goal is to manage black bear population numbers and distribution as an important part of Nevada's fauna, while providing hunting and other related recreational opportunities. The hunt recommendation goal is to allow bear hunting harvest, while managing for representation of older age cohorts of both sexes in the population.

Season prescriptions:

1. Black bear hunts may be authorized for "either sex" seasons, except that cubs or a sow accompanied by cubs may not be taken.
2. Hunts for either sex black bear "any legal weapon" seasons will occur on standard opening dates.

Any legal weapon seasons may begin on September 15 and run through December 31

Harvest management and tag quota prescriptions:

- A. Game Biologists will manage black bear harvest toward moderate harvest, while considering modeled population trends.
- B. Tags and harvest limits may be adjusted to maintain light or moderate harvests. The most recent 3-year mean or trend should receive greater emphasis when determining permit levels; emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Parameter	Light harvest	Moderate harvest	Heavy harvest
Percent females in harvest	<30%	30–40%	>40%
Percent adult females within female harvest	>55%	45–55%	<45%
Mean age of harvested males	>4 years	2–4 years	<2 years

BIGHORN SHEEP

As stated in the statewide Bighorn Sheep Management Plan, the Department's goals are to restore and maintain bighorn sheep herds at optimal population levels, provide diverse recreational opportunities, recognize hunting is a legitimate and desirable use of the bighorn sheep resource, strongly advocate habitats be maintained in good ecological condition, and reduce and manage risk of disease transmission.

Season prescriptions:

1. Game Management Units (GMUs) will be the primary geographic basis for managing bighorn harvest. GMUs may be subdivided to more optimally spread hunting pressure and harvest to all known areas of bighorn distribution during the hunting season.
2. Currently all hunts are "any legal weapon" seasons. Primitive weapon seasons may be considered if strong interest exists from sportsmen or to diversify bighorn hunting experiences.
3. Standard California and Rocky Mountain bighorn ram seasons will run September 1 through October 30, whereas most desert (Nelson) bighorn sheep seasons will run November 20 through December 20. Split or extended seasons may be implemented if hunter crowding and hunt efficacy becomes an issue. Standard season length will not be less than 21 days. For hunts involving Department of Defense lands, the north range season will start on the Saturday closest to Nov 20 and run for 23 days, and the south range season will begin on the third Saturday in December and run for 16 days.
4. Bighorn ewe seasons will be no shorter than 21 days and will occur on dates that do not overlap with bighorn ram seasons in same GMU. Other considerations are to minimize overlap with mule deer rifle seasons in same GMU, and to accommodate optimal timing of bighorn captures for management and disease surveillance.

Harvest management and target quota prescriptions:

- A. Criteria for ram tag numbers will be based on 8% of total estimated rams, not to exceed 50% of the estimated Class III and IV rams (i.e., rams \geq 6 years of age) derived from a reconstructive deterministic population model for each herd based on aerial survey data (primarily recruitment), best available survival rates, and estimated ingress/egress. These criteria are expected to obtain a 3-year average age of harvested rams of 6 years or older within each GMU.
- B. Criteria for establishing ewe hunts and tag numbers will be based on maintaining herd size at or below established sustainable management levels (SML) for herds of concern with seasonal or year-round habitat resource limitations, past cyclical declines associated with record high SML, or proximity to known disease risk. Opportunities for removal of source stock animals for low risk translocations will be considered first vs. ewe harvest.

ELK

The Department's Elk Management Goal is to maintain and, where possible, enhance elk populations to meet population objectives, all the while providing recreational opportunities and avoiding adverse impacts to the species, its habitat, and reducing land use conflicts. Local area elk sub-plans adopted by the Commission may identify additional objectives specific to those areas.

Current harvest objectives for elk are set forth in the Department's species management plans, *Nevada Elk Species Management Plan (1997)* and 10 subordinate sub-plans: *Bruneau River Watershed Environmental Analysis (1994)*; *Wells Resource Management Plan, Elk Amendment and Decision Record (1995)*; *Environmental Assessment for the Release of Elk into the Jarbidge Mountains, Nevada (1997)*; *NDOW Decision For Lands Outside of Wells RMP Elk Amendment Subplan*; *Central Nevada Elk Plan (2004)*; *Conservation Agreement for the Spring Mountain National Recreation Area (1998)*; *the White Pine County Elk Plan (1999)*; *Lincoln County Elk Management Plan (2003)*; *the Western Elko County Elk Management Plan (2003)*, and *the Humboldt County Elk Management Sub-Plan (2016)*. These plans provide both broad and specific management goals for elk in Nevada.

Season prescriptions:

Because of high population growth rates observed in the majority of elk herds and the relatively conservative population objectives contained within each of the associated elk sub-plans, the need to increase harvest on elk to reduce population growth, size, or both has demanded aggressive hunt structures (often six months in length) to maximize the harvest of elk (primarily cows) in these areas. These aggressive season structures are designed to meet the management requirements (i.e., population objectives) set forth in elk sub-plans, but alleviate conflicts with other users and resources simultaneously, while trying to reduce hunter densities in the field. Generally speaking, standardized season dates are superseded by the needs of meeting specific population objectives and reducing hunter densities in the field; to the extent practicable, standardization is attempted. Elk hunts are currently authorized for "antlered elk," "spike-only elk," or "antlerless elk."

1. Hunts for antlered (bull) elk, which currently consist of "any legal weapon," "muzzleloader," and "archery" seasons, vary start and end dates to reduce overlap with concurrent seasons. In some units a multiple any legal weapon split-season structure has been implemented to reduce hunter densities, increase hunt quality, and more effectively achieve desired harvest objectives.
 - a. Resident elk antlered any legal weapon
 - i. Single season structure begins on any of the following dates:
 - A. Begin on September 12 and runs for 21 days
 - B. Begin on November 6 and runs for 15 days
 - ii. Two-way split season structure begins on any of the following dates:
 - A. Early-split
Early season begins October 22 and runs for 15 days
Late season begins on November 6 and runs for 15 days
 - B. Late-split
Early season begins on November 6 and runs for 15 days
Late season begins on November 21 and runs for 14 days
 - C. Rut season structure begins on any of the following dates:
Begin on September 17 and runs for 14 days
Begin on the second Saturday of September and runs for 21 days (interstate hunt with Utah)
 - b. Resident elk antlered muzzleloader hunt
 - i. Single season structure begins on any of the following dates:
 - A. Begin on September 1 and runs for 16 days
 - B. Begin on September 17 and runs 14 days
 - C. Begin on October 5 and runs for 16 days
 - D. Begin on October 22 and runs for 15 day
 - ii. Rut season structure begins on any of the following dates:
 - A. Begin on September 17 and runs for 14 days (MA 16 and 17 rotating "rut" hunt)
 - c. Resident elk antlered archery hunt
 - ii. Single season structure begins on any of the following dates:
 - A. Begin on August 16 and runs for 16 days
 - B. Begin on August 25 and runs for 23 days
 - C. Begin on September 1 and runs for 20 days
 - d. Rut season structure begins on any of the following dates:
 - A. Begin on September 17 and runs for 14 days (MA 16 and 17 rotating "rut" hunt between weapon classes)
2. Hunts for spike elk, which currently consist solely of "any legal weapon" seasons, utilize varying start and end dates in an attempt to minimize overlap with concurrent seasons. In some units, a multiple any legal weapon split-season structure has been implemented to reduce hunter densities, increase hunt quality, and more effectively achieve desired harvest objectives.

- a. Resident elk spike any legal weapon hunt
 - i. Single season structure begins on any of the following dates:
 - A. Begin on September 21 and runs for 14 days
 - ii. Three-way split season structure begins on any of the following dates:
 - A. Early-split begins on September 17 and runs for 18 days or begins on October 1 and runs for 10 days
 - iii. Mid-split season structure begins on any of the following dates:
 - A. Begin on October 5 and runs for 16 days
 - B. Begin on October 11 and runs for 10 days
 - iv. Late-split season structure begins on any of the following dates:
 - A. Begin on November 21 and runs for 56 days
 - B. Begin on November 21 and runs for 71 days
 - C. Begin on December 5 and runs for 42 days
3. Standard hunts for antlerless elk, which currently consist of "any legal weapon," "muzzleloader," and "archery" seasons, vary start and end dates in an attempt to reduce overlap with concurrent seasons. Antlerless elk hunts are used where the elk population requires reduction or stabilization (i.e., above population objective), or when conflicts with other land management uses exist. Where populations are above local sub-plan population objectives, a more aggressive harvest strategy is implemented to bring populations closer to objective. In some units, a multiple any legal weapon split-season structure has been implemented to reduce hunter densities, increase hunt quality, and more effectively achieve desired harvest objectives. Any legal weapon seasons may be structured to begin and end prior to or after any legal weapon seasons for antlered or spike-only elk seasons, and may extend through January to attain the harvest objectives.

In areas where substantial cow harvest is desired and where hunter congestion may be an issue, "antlerless elk management" hunts may be implemented and antlerless tags issued to deer tag holders where the elk and deer units overlap. This hunt strategy provides an additional option to meet cow elk harvest objectives while reducing the potential for hunter congestion.

Depredation hunts are used in management areas and units with no existing sup-plan, in areas designated as "elk restricted" areas, or to address existing or potential private land conflicts. Depredation hunts are used to liberalize tag quotas and relax eligibility requirements to facilitate the most effective harvest possible. These seasons may be structured to begin and end at any time in order to best meet the management objectives of the local herd.

Antlerless elk landowner hunts are used to specifically target offending elk on private lands, where conflicts occur.

- a. Resident elk antlerless any legal weapon hunt
 - i. Single season structure begins on any of the following dates:
 - A. Begins on September 21 and runs for 14 days
 - B. Begins on October 1 and runs for 20 days
 - C. Begins on November 22 and runs for 55 days
 - ii. Two-way split season structure begins on any of the following dates:
 - A. Early-mid splits
 - Early season begins on October 1 and runs for 10 days
 - Mid season begins on October 11 and runs for 10 days
 - B. Early-Late splits
 - Management Area 11 and Unit group 108^C, 131, and 132
 - Early season begins on October 1 and runs for 20 days
 - Late season begins on December 5 and runs for 42 days
 - Management Areas 21 and 22
 - Early season begins on October 1 and runs for 16 days

- Late season begins on December 5 and runs for 42 days
 - Management Area 24
 - Early season begins on October 1 and runs for 16 days
 - Late season begins on November 21 and runs for 56 days
 - iii. Three-way split season structure begins on any of the following dates:
 - A. Management Area 6
 - Early season begins on September 17 and runs for 18 days
 - Mid season begins on October 5 and runs for 16 days
 - Late season begins on November 21 and runs for 72 days
 - B. Management Areas 7 and 8
 - Early season begins on October 1 and runs for 10 days
 - Mid season begins on October 11 and runs for 10 days
 - Late season begins on December 5 and runs for 42 days
 - C. Management Area 23
 - iv. Early season begins on October 1 and runs for 16 days
 - Mid season begins on December 5 and runs for 22 days
 - Late season begins on December 27 and runs for 20 days
 - b. Resident elk antlerless muzzleloader hunt
 - i. Single season structure begins on any of the following dates:
 - A. Begins on August 16 and runs for 16 days
 - B. Begins on September 1 and runs for 16 days
 - C. Begins on September 17 and runs for 14 days
 - c. Resident elk antlerless archery hunt
 - i. Single season structure –begin on any of the following dates:
 - A. Begins on August 1 and runs for 24 days
 - B. Begins on August 1 and runs for 15 days
 - d. Antlerless elk management hunts; 4481, 4476, and 4411
 - i. Hunt 4481
 - A. Season structures mirror associated 1331 deer seasons in the following unit groups: 061,062, 064, 066-068; 071-079, 091; 101-109; 131-134; 161-164; 221-223; and 231
 - ii. Hunt 4476
 - A. Season structures mirror associated 1331 deer seasons in the following unit groups: 061,062, 064, 066-068; 071-079, 091; 101-109; 131-134; 161-164; and 231
 - ii. Hunt 4411
 - A. Season structures mirror associated 1331 deer seasons in the following unit groups: 061,062, 064, 066-068; 071-079, 091; 101-109; 131-134; 161-164; and 231
 - e. Resident elk antlerless any legal weapon depredation hunt
 - i. Single season structure begin on any of the following dates:
 - A. Begins on August 1 and runs for 168 days
 - ii. Three-way split season structure –begin on any of the following dates:
 - A. Unit 121
 - First season begins August 1 and runs for 31 days
 - Second season begins September 1 and runs for 30 days
 - Third season begins October 1 and runs for 123 days
 - iii. Four-way split season structure begins on any of the following dates:
 - A. Unit 081
 - First season begins on August 1 and runs for 24 days
 - Second season begins on September 17 and runs for 14 days
 - Third season begins on October 1 and runs for 10 days
 - Fourth season begins on October 11 and runs for 10 days
 - B. Units 144,145

First season begins on August 1 and runs for 31 days
Second season begins on September 1 and runs for 30 days
Third season begins on October 1 and runs for 31 days
Fourth season begins on November 1 and runs for 76 days

- f. Landowner elk antlerless
 - i. Seasons dates can occur at any point during the year and are developed in accordance with NRS 501.351 and 503.595
- 4. Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife-habitat conservation and enhancement, and provide incentives for landowners whose private rangelands are used by elk.
 - a. PIW Resident Elk Antlered Any Legal Weapon Hunt
 - i. Season dates follow the standard dates for hunts 4151, 4161, and 4156
 - b. Heritage Elk Any Legal Weapon Hunt
 - i. Season dates occur from August 1–December 31 in any open elk unit
 - c. Silver State Elk Any Legal Weapon Hunt – 4300
 - i. Season dates occur from August 1–December 31 in any open elk unit
 - d. Dream Elk Any Legal Weapon Hunt – 4500
 - i. Season dates follow the standard dates for hunts 4151, 4161, and 4156
 - e. Elk Incentive Any Legal Weapon Hunt – 4131 and 4231
 - i. Season dates follow the standard dates for hunt 4151
 - f. Elk Incentive Archery Hunt – 4132 and 4232
 - i. Season dates follow the standard dates for hunt 4161
 - g. Elk Incentive Muzzleloader Hunt – 4133 and 4233
 - i. Season dates follow the standard dates for hunt 4156

Harvest management and tag quota prescriptions:

- A. For antlered elk, the differential between the estimated pre-hunt bull ratio, derived from the modeled population estimate, and the desired post-hunt bull ratio, along with an anticipated (using the previous three-year average) hunter success rate, and hunt demand, determine the recommended antlered elk quota by the Department for a given unit, or unit group, and weapon class.
 - 1. Current policy and the Nevada Elk Species Management Plan identify a desired post-hunt bull ratio of between 15–40 bulls: 100 cows in populations that support harvest programs, except where depredation is being addressed. While the observed statewide post-season bull ratio is 38 bulls: 100 cows, limited sightability (e.g., mature bulls are not with large cow groups and are often in thick tree cover) of bulls during annual winter surveys results in extremely low biased estimates of bull: cow ratios in most situations. As such, a targeted post-season bull ratio objective (modeled) ranging from 67–88 bulls per 100: cows is generally implemented for quota determination. These higher ratios have been used, based on the desires of the public through the CAB and Commission process and generally target a high-quality hunting experience and increase the odds of being able to harvest older age class animals.
- B. For antlerless elk in areas where sub-plans exist, quota recommendations are based on specific population management objectives. These objectives may be used to reduce, stabilize, or encourage growth of elk populations. In circumstances where populations are below objective, cow harvest may be designed to slow

growth rates while still allowing herds to increase towards population objectives. In areas where no sub-plan currently exists, quota recommendations are based on providing hunting harvest, reducing conflicts (real or perceived) with other resource users, controlling population growth and expansion, or reducing private land depredation issues.

1. Where antlerless (hunts 4181, 4176, and 4111) harvest is currently occurring, desired harvest rates range from 6–45% of the adult female population.
 2. For antlerless elk management hunts (4481, 4476 and 4411), tags are issued as a percentage of the total number of deer tags in a given unit and range from 20–100%.
 3. Landowner elk antlerless hunt
 - i. Harvest strategies are developed in accordance with NRS 501.351 and 503.595
- C. Various specialty elk hunts exist which offer high quality hunting experiences, generate revenue for wildlife conservation, and provide incentives for landowners whose private rangelands are utilized by elk. Quotas for PIW, Heritage, Silver State and Dream hunts are generally very limited due to the unique nature of the hunts. Quotas for Elk Incentive hunts are calculated by use days of elk on private lands, as identified in NAC 502.42279.

MOUNTAIN GOATS

The Department's Mountain Goat Management Goal is to protect, maintain, or increase the resources for the enjoyment and use by the people now and in the future.

1. Units may be subdivided into smaller hunt units to prevent hunters concentrating in specific areas within mountain ranges or to encourage hunting within areas with available rams that may be avoided because of access difficulty.
2. All hunts will be "any legal weapon" seasons.
3. Mountain goat seasons for "any mountain goat" will begin and end on standard season dates, running September 1 through October 30.

Harvest management and tag quota prescriptions:

- A. Hunt recommendations should be developed using estimated populations based on survey protocols and sighting rates described in scientific literature. When a clear trend in population parameters exists, emphasize the most recent year's data. When no clear trend exists, emphasize 3-year mean data.
- B. Harvest will be managed to allow for the take of 2–5% of the total population. Game Biologists will manage mountain goats within the guideline range.

MOUNTAIN LION

The Department's Lion Management Goal is to manage the mountain lion population, its numbers, and distribution, as an important part of Nevada's fauna while providing mountain lion hunting and other recreational opportunities.

Season prescriptions:

1. Hunt recommendations will be made on a unit, zone (grouping of biologically similar units), or regional basis with established harvest limits.

2. Mountain lion hunts may be authorized for "either sex" seasons, except that spotted kittens or females accompanied by spotted kittens may not be taken.
3. Hunts for either sex mountain lion "any legal weapon" seasons will occur on standard opening dates.

Any legal weapon seasons may begin on March 1 and run through end of February

Harvest management and tag quota prescriptions:

- A. Game Biologists will manage mountain lion harvest by examining population trends and harvest characteristics and establishing appropriate harvest limits by unit, zone, or region.

MULE DEER

The Department's mule deer management goal is to maintain and, where possible, enhance deer populations at levels that provide maximum and diverse recreational opportunities, while avoiding adverse effects to the species and its habitat. Current harvest objectives for mule deer generally follow the *Nevada Management Plan for Mule Deer* which can be found on the state of Nevada website.

Season prescriptions:

Generally, hunting seasons are for "antlered mule deer" or "antlerless mule deer." "Either sex" tags are issued to junior hunters in accordance with NAC 502.063. "Antlerless mule deer" hunts are used when deer populations require reduction or stabilization and to provide hunter harvest. Antlered mule deer hunts are used to manage the ratio of males to females in the population while maintaining a healthy deer herd. Although not specified in current policy, in general, the Department uses a management objective of 30 males: 100 hundred females as the target ratio to maximize participation from hunters while maintaining a quality hunting experience. This ratio is driven from the desires of the public through CAB and Commission process and is thus more socially than biologically driven.

Hunts for antlered mule deer "any legal weapon," "muzzleloader," and "archery" seasons typically follow a progression from late summer (archery), mid-autumn (muzzleloader) to late autumn months (any legal weapon). Seasons may be split to reduce hunter crowding or more effectively target harvest timing. "Early" seasons provide greater probabilities to draw a tag and are primarily designed to achieve management objectives, whereas "late" seasons provide chances to harvest an older age class animal and typically have reduced quotas compared to early season hunts. Any legal weapon "antlerless" seasons are structured to meet the population objectives of the local herd while still considering "antlered" hunting seasons and timing of annual surveys as the top priorities.

Junior hunts are structured to provide statewide tag numbers equivalent to at least the number of junior tag applicants for the previous year. Junior "antlered or antlerless mule deer" seasons coincide with the any legal weapon season, the muzzleloader season, and the archery season dates for the unit or unit groups in which the hunt is adopted.

1. Any legal weapon antlered
 - a. Single seasons may begin on one of the following dates:
 - i. Begin on October 5 and runs for 24 days
 - ii. Begin on October 5 and runs for 28 days
 - iii. Begin on October 5 and runs for 29 days
 - iv. Begin on October 5 and runs for 32 days
 - v. Begin on November 5 and runs for 26 days
 - vi. Begin on December 11 and runs for 22 days
 - vii. Begin on December 21 and runs for 13 days

- b. Early and late split seasons may begin on any of the following dates:
 - i. Early seasons begin on October 5 and runs for 16 days
 - ii. Late seasons begin on October 21 and runs for 16 days
- c. Three-way split seasons may begin on any of the following dates:
 - i. Area 10
 - A. Early season begins on October 1 and runs for 15 days
 - B. Mid season begins on October 15 and runs for 14 days
 - C. Late season begins on October 29 and runs for 11 days
 - ii. Area 22
 - A. Early season begins on October 5 and runs for 12 days
 - B. Mid season begins on October 17 and runs for 14 days
 - C. Late season begins on October 31 and runs for 7 days
- 2. Muzzleloader antlered
 - a. Single Seasons may begin on one of the following dates:
 - i. Begin on September 10 and runs for 21 days
 - ii. Begin on November 10 and runs for 21 days
 - iii. Begin on December 1 and runs for 15 days
 - iv. Begin on December 11 and runs for 10 days
- 3. Archery antlered
 - a. Single seasons:
 - i. Begin on August 10 and runs for 31 days
 - ii. Begin on November 1 and runs for 20 days
 - iii. Begin on December 1 and runs for 10 days
 - b. Early and late split seasons - may begin
 - i. Area 7 and 12
 - A. Early season begins on August 10 and runs for 31 days
 - B. Late season begins on November 10 and runs for 21 days
 - ii. Area 10
 - A. Early season begins on August 10 and runs for 31 days
 - B. Late season begins on November 10 and runs for 11 days
 - iii. Area 19
 - A. Early season begins on August 10 and runs for 31 days
 - B. Late season begins on December 1 and runs for 32 days
 - iv. Area 20
 - A. Early season begins on August 10 and runs for 31 days
 - B. Late season begins on December 16 and runs for 17 days
- 4. Antlerless any legal weapon depredation hunts
 - a. Early and late split seasons may begin:
 - i. Early seasons begin on Sept 19 and runs for 10 days
 - ii. Late seasons begin on November 30 and runs for 12 days
 - b. Antlerless any legal weapon general hunts
 - i. Single seasons may begin on:
 - A. October 10 and runs for 22 days
 - B. October 5 and runs for 16 days
 - C. November 6 and runs for 15 days
 - ii. Early and Late split seasons may begin on:
 - A. Early seasons begin on October 10 and runs for 22 days
 - B. Late seasons begin on November 6 and runs for 15 days

5. Junior antlered or antlerless archery
 - a. Generally follow the archery seasons, which begin on August 10 and run for 31 days
6. Junior antlered or antlerless muzzleloader
 - a. Generally follow the adult muzzleloader seasons with the following exceptions:
 - i. Unit Group 114-115 begins on September 10 and runs for 21 days
 - ii. Unit Group 181-184 begins on September 10 and runs for 21 days
7. Junior antlered or antlerless any legal weapon
 - a. Many single season hunts coincide with adult hunts of the same weapon class. However the following exceptions occur:
 - i. Early and late split seasons are combined into single season for the junior hunters and are about 3 days shorter.
 - A. In Area 10, October 5 and runs for 24 days
 - B. Area 22, October 5 and runs for 28 days

Harvest management and tag quota prescriptions:

Antlered mule deer objectives

Commission Policy 24 generally states the Department shall appropriate harvest by developing hunting seasons for mule deer that either optimize the chance for hunters to draw a tag or for the chance to harvest and older age class buck if a hunter draws that specific hunt. Although no specific language has been adopted by the Commission, in general, the Department has used a harvest objective of 30 males: 100 females as a guideline in most management units. In some instances, the Department has managed for higher buck ratios where local citizens have voiced the desire for more hunts that provide for the harvest of older age class bucks (e.g. Hunt Units 014, 065, 081, 231). The Department also uses late seasons to provide harvests of older age class bucks where reduced quotas and accessible deer typically result in higher success rates and more mature deer being harvested.

- A. Current management practices for antlered mule deer hunts are categorized by the following breakdown of hunt units with desired post-hunt buck to doe ratios of:
 1. Below 30 bucks: 100 does = 15% of all hunt Units; 021; 032; 192; 202, 205–208; 203; 271
 2. 30 bucks: 100 does = 46% of all hunt units; 014; 022; 033; 034; 035; 041–042; 043–046; 061,062,064,066–068; 071–079,091; 101–109; 111–113; 121; 131–134; 141–145; 161–164; 194,196; 201,204; 241–245; 291
 3. Between 31–35 bucks: 100 does = 24% of all hunt units; 011–013; 015; 031; 051; 081; 151–156; 171–173; 181–184; 195; 221–223
 4. Above 35 bucks: 100 does = 15%; 065; 114–115; 211–213; 251–253; 261–268
 5. The overall range of buck to doe ratios in Nevada is currently between 20–55 Bucks:100 Does

Antlerless mule deer harvest objectives

Antlerless mule deer harvests are used to manage mule deer population size, growth, and to provide hunter harvest in some instances. Recommendations on when to implement an antlerless harvest are based on an overall assessment of the carrying capacity, trends in fawn: doe ratios, body condition of deer either captured or harvested, or a combination of the above factors. Antlerless recommendations consider multiple parameters in concert with population modeling to assess herd status and develop tag quota recommendations to meet management objectives. The percentage of does harvested from the total population is determined by the desired population response (i.e., decrease overall population size or stabilize population growth rate).

- A. Current management practices for antlerless mule deer hunts are categorized by the following breakdown of hunt units with desired doe harvest rate of:
 - i. 1%; 051
 - ii. 2%; 043–046; 151–155
 - iii. 6-10%; 061,062,064,066–068; 071–079; 101–109

Restricted nonresident deer hunts

“Restricted nonresident deer hunts” are designed to provide nonresident hunters an opportunity to hunt with a licensed Nevada guide for mule deer. These tags are drawn in a separate drawing before the main draw for big game and nonresidents must be accompanied by licensed master guide at all times. Any legal weapons may be used during these hunts. Seasons for restricted nonresident deer tags coincide with any legal weapon deer hunts and are issued according to NRS 502.147. Nonresident applicants who apply in the restricted nonresident guided deer hunt are not eligible to apply for deer tags in the big game main draw in the same year.

Landowner compensation tags for mule deer

An owner, lessee, or manager of private land in this state may apply to the Department for the issuance of deer tags for compensation of these animals using their private lands. These tags can be used by the owner, lessee, or manager if he holds a valid Nevada hunting license or the tags can be sold to any holder of a valid Nevada hunting license at any price mutually agreed upon. Landowners, lessees, or managers of private land will be awarded 1 tag for every 50 mule deer present on the property as compensation for damage to private land as per regulation NRS 502.145 and NAC 502.424.

SMALL GAME AND FUR-BEARERS

The Department's Upland Game Management goal is to provide as much upland game hunting as possible. Seasons will be designed to allow standardization and simplification of hunt regulations, better distribution of hunters, and the opportunity to hunt more than 1 species at the same time.

GREATER SAGE-GROUSE

1. Hunting seasons for sage-grouse should be based on careful assessments of population size and trends.
2. If populations occur over relatively large geographic areas and are stable to increasing, seasons and bag limits can be relatively liberal (2- to 4-bird daily bag limit and a 2- to 5-week season) for hunting seasons allowing firearms.
3. If populations are declining (for 3 or more consecutive years) or trends are unknown, seasons and bag limits should be generally conservative (1- or 2-bird daily bag limit and a 1-to 4-week season) for hunting seasons allowing firearms, or suspended (for all types of hunting, including falconry and Native American subsistence hunting) because of this species' population characteristics.
4. Where populations are hunted, harvest rates should be $\leq 10\%$ of the estimated fall population to reduce negative effects on the subsequent year's breeding population.
5. Populations should not be hunted where < 300 birds comprise the breeding population (i.e., < 100 males are counted on leks).

WILD TURKEY

1. Wild turkey spring seasons will be for "bearded turkey" only.
2. Wild turkey fall season may be for "any" turkey.
3. Spring seasons will be established to begin on the fourth Saturday in March and extend through the first Sunday in May. Season dates may be adjusted or split to avoid hunter crowding or conflicting land uses.
4. Hunting hours will be from sunrise to sunset daily for both spring and proposed fall turkey seasons.

5. Fall seasons may be established if population size, access, and hunter densities may be adequately addressed.

OTHER SMALL GAME

1. Upland game seasons will be open statewide when feasible.

California, Gambel's, and mountain quail, and chukar and Hungarian partridge season will open on the second Saturday in October and run through the first Sunday in February unless population size and distribution dictates otherwise.

Blue (dusky and sooty) and ruffed grouse season will open on September 1 and run through December 31 unless population size and distribution dictates otherwise.

Cottontail and pygmy rabbits and white-tailed jackrabbit seasons will open on the second Saturday in October and run through February 28

Pheasant season will open on November 1 and run through November 30; seasons will allow for the harvest of "cocks" only

Snowcock seasons will open on September 1 and run through November 30

A two-day youth season for chuck and Hungarian partridge, California and Gambel's quail, cottontail and pygmy rabbits, and white-tailed jackrabbits will be held annually on the fourth Saturday and Sunday in September.

2. Migratory game bird seasons and bag limits will be set by the Commission annually according to Migratory Bird Treaty Act and Pacific Flyway guidelines.

FUR-BEARERS

The Department's fur-bearing mammal management objectives are to maintain present range, distribution, and population levels in Nevada; and to allow for the maximum recreational, economic and aesthetic uses commensurate with existing populations statewide. Fur-bearer seasons will be set for a 2-year time period. Seasons and season dates will be reviewed by the commission.

Season prescriptions:

Population estimates for some of the more common furbearer species (beaver, kit fox, gray fox) harvested in Nevada have been generated by using USGS GAP analysis data. GAP data uses maps that delineate topographical, biological, and geological features to identify various habitats. GAP data for each species is paired with habitat suitability models that specify known habitat requirements. This process provided the Department with maps indicating available statewide habitat for each of the species. The GAP data is then used in conjunction with biological density and home range data for each species to generate population estimates. Density and home range data were derived from research data either in Nevada, or in the absence of Nevada research, from nearby states (Utah and California) with similar habitat types. Population estimates and estimated harvest rates based on expanded trapper harvest data will be compared annually. If harvest of any of those species is estimated to be in excess of 10% of the estimated population, the Department will recommend restricting harvest.

BOBCAT

The Department's bobcat management objectives are to sustain a healthy bobcat population within existing suitable habitat and provide quality recreational opportunities for bobcat harvest. Bobcat seasons will be set for a 2-year time period.

Season prescriptions:

1. Maintain or return to the standard season strategy if at least 2 variables (3-year average) are within the historical 95% confidence interval, or if 1 variable is above, 1 below, and 1 within the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Standard season \approx 94 days (Last Saturday in November and running through last day in February).

2. Initiate a restrictive season if 2 or more variables fall below the historic 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Restrictive season \approx 64 days (December 15 running through the third Saturday in February).

3. Initiate a liberal season if ≥ 2 variables are above the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Liberal season \approx 120 days (November 1 running through the last day in February).

4. During any period if the 3-year average of harvest falls below the low historical range (1989) AND the 3-year average of individuals reporting bobcat harvest drops below the low historical range (209), the season will default to the liberal season until either of these 2 variables increases to within the historical range. Then, the standard season prescriptions will be followed.

Historical 95% confidence limits

Variable	Mean	95% confidence interval
Kitten production (kittens/100 females)	66	57–75
Adult male to adult female ratio (males/ 100 females)	141	137–146
Harvest effort (trap nights/bobcat harvested)	171	159–183



STATE OF NEVADA

DEPARTMENT OF WILDLIFE

1100 Valley Road • Reno, Nevada 89512
(775) 688-1500 Fax (775) 688-1595

MEMORANDUM

October 20, 2015

To: Interested public

From: Brian Wakeling, Chief, Game Division

Re: **DRAFT Harvest Management Guidelines for Hunting Seasons in Nevada**

I would encourage you to read the attached DRAFT Harvest Management Guidelines for Hunting Seasons in Nevada and provide the Game Division with your feedback. This is a compilation of guidelines that have been used formally, and in many cases informally, to establish hunts and recommend tag quotas. Game Biologists will recognize that I have taken some degree of literary license in capturing what we do – much of it currently involves complex mathematical modeling that may appear opaque to those unfamiliar with the process. It is our goal to improve the transparency in how we adjust tag recommendations. At the same time, we want to be able to provide clear direction to our biologists on what we are trying to achieve. This will reduce confusion among the public, the Commission, the County Advisory Boards, and the biologists as we continue this discourse.

Our staff has compiled most of these guidelines based on what we do. Where clear guidelines were lacking, we initiated a draft or "straw dog" to begin discussions. This is the first draft in what is intended to be a process for iterative development and progression. We want to get better. We will rely on the statutes that dictate our engagement, feedback from County Advisory Boards, policy direction and administrative code adopted by the Commission, the biology of the species we manage, and the desires of the public for whom we manage wildlife. Using this framework, we intend to work towards a set of guidelines that the Commission may adopt in June 2016.

These guidelines are not regulation and will not have the force of law. They are designed to provide a recipe to guide hunt recommendations under normal conditions. There are times that the Commission may choose to deviate from these guidelines and there are times when Department recommendations may not follow them precisely – when the latter occurs, we will explain why. But if we have a common understanding, unnecessary confusion may be averted.

So share your thoughts with us. Attend a town hall meeting, mail your comments to the Game Division, Harvest Management Guidelines, 1100 Valley Road, Reno, NV 89512, or FAX them to 775-688-1518. Tell us what you like or how we can improve. Thank you for your input!

NEVADA DEPARTMENT OF WILDLIFE

HARVEST MANAGEMENT GUIDELINES FOR HUNTING SEASONS

Current Practices Review Draft

Draft October 20, 2015

TABLE OF CONTENTS

Schedule for formulating harvest management guidelines 3

Objective 4

Harvest management guideline approaches 4

Big game 6

Pronghorn antelope 6

Black bear 7

Bighorn sheep 8

Elk 8

Mountain goats 10

Mountain lion 11

Mule deer 11

Small game and fur-bearers 13

Greater sage-grouse 14

Wild turkey 14

Other small game 14

Fur-bearers 14

Bobcat 15

Current Practices Review Draft

SCHEDULE FOR FORMULATING HARVEST MANAGEMENT GUIDELINES

Estimated Date	Hunt Guidelines Schedule	Responsibility
August 8, 2015	Introduce Harvest Management Guidelines to Commission	Game Division
September 25, 2015	Gather existing guidelines into a single document	Game Division
October 9, 2015	Gather comparative data from neighboring states	Game Division
October 16, 2015	Provide draft guidelines generally followed where none exist	Game Division
November 2–6, 2015	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Game Division
November 14, 2015	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
December 5, 2015	Develop revision of harvest management guidelines based on biological data and public opinion	Guidelines Team
January 12, 2016	Draft public survey instrument to seek input on specific questions that may develop	Guidelines Team
February 29, 2016	Summarize feedback from public survey	Guidelines Team
March 7–11, 2016	Hold town hall meetings to share harvest management guidelines with the public and gather feedback	Guidelines Team
March 25, 2016	Provide Commission with informational update on status of harvest management guidelines and preliminary feedback from public	Commission
March 30, 2016	Complete summary of public comments	Guidelines Team
May 30, 2016	Final revision to harvest management guidelines	Guidelines Team
June 24, 2015	Present to Commission for adoption	Commission

OBJECTIVE

Harvest management guidelines are designed to be used by Nevada Department of Wildlife (Department) Game Biologists when formulating hunt recommendations. Harvest management guidelines are intended to provide general guidance on the parameters for which hunted or trapped species are managed. Like hunt recommendations, harvest management guidelines are shared with the Nevada Board of Wildlife Commissioners (Commission) and County Advisory Boards to Manage Wildlife (CABs) before approval in public session following a regular review cycle described in the preceding pages.

The harvest management guidelines themselves are one piece of an overall planning approach used by the Commission and Department in managing wildlife. While harvest management guidelines describe what the Department manages toward, other protocols describe how that data is collected. Management plans (e.g., species management plans and related sub-planning documents) describe landscape level objectives, opportunities for habitat enhancement, specific herd management objectives (e.g., increase population), and management challenges (e.g., persistent low fawn recruitment for pronghorn).

The Department also operates under a Commission-approved strategic plan that provides agency vision, an annual work plan developed under the Wildlife and Sport Fish Restoration (WSFR) Program, annual or biennial translocation plans approved by the Commission, and an annual implementation plan that ties together budgets, specific tasks, and work units for the upcoming year.

The Department manages Nevada's wildlife within the biological limits of each species. Management strategies are developed to address social perceptions, which are routinely more conservative than the limits at which wildlife may be biologically managed.

Ultimately, the Department manages wildlife in the public trust for all of Nevada. All game animals, from predators to big game, are managed as part of an important ecosystem to be sustained for future generations of Nevadans and our visitors to enjoy. These harvest management guidelines have been developed to meet a variety of hunting desires and strive to provide adequate opportunity for all, while maintaining a self-sustaining resource. The guidelines are based on the best available biological and social science. Nevada has a diverse wildlife resource, yet many of these resources are limited in supply. The following guidelines attempt to provide the diversity of experiences desired by the hunters of Nevada, while providing the necessary management so that everyone will benefit from diverse wildlife populations in the future.

HARVEST MANAGEMENT GUIDELINE APPROACHES

The Department and Commission will revisit the guideline package with the public every 3 years. The 3-year hunt guideline framework aligns with the following approaches:

- Obtain input from the Commission on hunt guideline concerns that were brought to their attention; use this input to guide public survey questions.
- Use CABs and public outreach avenues to ensure inclusion of affected and interested customers in guideline and hunt recommendation development.
- Maintain consistent wildlife survey protocol and interpretation to develop hunt recommendations across the state in accordance with other pertinent management plans (e.g., species management plans and annual work plans). Population management objectives (including male to female ratios, harvest rate, or other parameters by which we manage populations) for specific units may be described within these pertinent species management plans.
- Provide hunt structures across the state consistent with Commission policy and statewide species plans. Simplify hunt regulations and restrictions related to the hunt structure. Standardized and simplified hunt structures should not obstruct diversity of hunting opportunities.

- Provide for a diversity of hunter opportunity while maintaining wildlife population health. Guidelines for this approach are:
 - Limit hunt opportunity when the legal animals are most vulnerable (e.g., breeding period) except to provide alternative or late hunting opportunity in some management areas.
 - Allocate hunt opportunity with respect to weapon type demand per Commission Policy 24.
 - Use innovative management hunts to address specific management objectives that are not being achieved through standard hunt structures.
 - Use split hunt structure to reduce user conflicts and hunter densities.
 - Use targeted harvest by hunters to address human-wildlife conflicts when appropriate.
 - Reserve about 10% hunting opportunity for nonresident hunters in limited entry hunts.
- Emphasize youth and new big game hunter opportunities when possible. In doing so, provide diverse and dispersed hunt opportunities to allow equitable tag availability and limited conflict with other uses.
- Emphasize small game, predator-furbearer, and other wildlife hunt opportunities. Guidelines for this approach are:
 - Liberalize bag and possession limits as well as season lengths within sustainable biological means to encourage hunter participation.
 - Maintain consistent season opener and structure to reduce hunter confusion among years.

Current Practices Review Draft

BIG GAME

PRONGHORN ANTELOPE

The Department's Pronghorn Antelope Management Goal is to maintain and, where possible, enhance pronghorn antelope populations at levels that provide diverse recreational opportunities, while avoiding adverse effects to the species and its habitat.

Season prescriptions:

1. Pronghorn antelope hunts may be authorized for "horns-longer-than-ears" or "horns-shorter-than-ears."
2. Hunts for horns-longer-than-ears pronghorn antelope "any legal weapon," "muzzleloader," and "archery" seasons will occur on standard opening dates. Seasons may be split to reduce hunter crowding or more effectively target harvest timing.

Any legal weapon seasons may begin on August 22 and run for 16 days

If split seasons are implemented, any legal weapon seasons may begin on August 22 and run for 7 days, followed by a second any legal weapon season that may begin on August 29 and run for 10 days

Muzzleloader seasons may begin on September 25 and run for 11 days

Archery seasons may begin on August 1 and run for 20 days

3. Hunts for horns-shorter-than-ears pronghorn antelope "any legal weapon" seasons will be used to manage pronghorn antelope population size and distribution.

Any legal weapon seasons may be structured to begin and end to best meet the management objectives of the local herd

Opportunity prescriptions:

- A. Game Biologists will manage pronghorn for the center of guideline ranges while considering trends. The most recent 3-year mean or trend in buck:doe ratios and fawn:doe ratios should be considered when determining horns-longer-than-ears tag levels. For all other parameters, emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists. Hunting opportunities should provide an equitable allocation of harvest among weapon types.
- B. Population modeling will be used to assist Game Biologists in assessing magnitude of changes in tag quota recommendations needed to achieve management objectives. Population trends will be inferred from observation rates from standardized surveys.
- C. In general, tag quotas will be adjusted to achieve the following management objectives for pronghorn antelope:

Horns-longer-than-ears pronghorn antelope harvest objectives

Guideline	Decrease	Stay the Same	Increase
Bucks:100 Does	<30	30 to 45	>45
Fawns:100 Does	<35	35 to 45	>45
Population Trend	Decreasing	Stable	Increasing

Horns-shorter-than-ears pronghorn antelope harvest objectives

Horns-shorter-than-ears pronghorn antelope harvests are used to manage pronghorn antelope population size, growth, and distribution. Recommendations on when to implement a horns-shorter-than-ears harvest are based on

an overall assessment of the proximity to the range carrying capacity, competition with other uses for limited resources, or combination of the above factors. Horns-shorter-than-ears pronghorn antelope recommendations must consider multiple parameters in concert with population modeling to assess herd status and develop tag quota recommendations to meet management objectives.

Parameters	No harvest	Light harvest	Harvest
Five-year population trend (CPUE observed)	Stable	Stable or declining	Stable or increasing
Fawn to doe ratio (three-year trend)	Stable or increasing	Stable or declining	Stable or increasing
Proximity to carrying capacity	Below	Above	Below or above
Body condition	Moderate	Poor to moderate	Good or poor
Estimated population size	<300	300 to 2,000	>2,000
Drought conditions or habitat damage	None or little	Severe	None or severe
Targeted harvest percent of adult population	0%	2 to 4%	8 to 10%

Private land issues

Issues involving private land depredation issues will managed in accordance with NAC 502.424.

BLACK BEAR

The Department's Bear Management Goal is to manage black bear population numbers and distribution as an important part of Nevada's fauna, while providing hunting and other related recreational opportunities. The hunt recommendation goal is to allow bear hunting opportunity, while managing for representation of older age cohorts of both sexes in the population.

Season prescriptions:

1. Black bear hunts may be authorized for "either sex" seasons, except that cubs or a sow accompanied by cubs may not be taken.
2. Hunts for either sex black bear "any legal weapon" seasons will occur on standard opening dates.

Any legal weapon seasons may begin on September 15 and run through December 31

Opportunity prescriptions:

- A. Game Biologists will manage black bear harvest toward moderate harvest, while considering modeled population trends.
- B. Tags and harvest limits may be adjusted to maintain light or moderate harvests. The most recent 3-year mean or trend should receive greater emphasis when determining permit levels; emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists..

Parameter	Light harvest	Moderate harvest	Heavy harvest
Percent females in harvest	<30%	30–40%	>40%
Percent adult females within female harvest	>55%	45–55%	<45%
Mean age of harvested males	>4 years	2–4 years	<2 years

BIGHORN SHEEP

The Department's Bighorn Sheep Management Goals are to increase bighorn sheep populations and to provide diverse recreational opportunities, while avoiding adverse effects to the habitat and reducing risk of disease transmission.

Season prescriptions:

1. Units may be subdivided into smaller hunt units to prevent hunters concentrating in specific areas within mountain ranges or to encourage hunting within areas with available rams that may be avoided because of access difficulty.
2. All hunts will be "any legal weapon" seasons.
3. Bighorn sheep seasons for "rams" will begin and end on standard season dates. California and Rocky Mountain bighorn sheep seasons will run September 1 through October 30, whereas desert bighorn sheep seasons will run mid-November through mid-December. Split seasons may be implemented if hunter crowding and hunt efficacy becomes an issue. Season dates may be amended in units where hunting occurs on Department of Defense lands and access is limited by their regulations.
4. Bighorn sheep seasons for "ewes" will begin and end on standard season dates. California bighorn sheep seasons will run November 6 through November 30, whereas desert bighorn sheep seasons will run October 5 through October 25.

Opportunity prescriptions:

- A. Hunt recommendations should be developed using estimated populations based on survey protocols and sighting rates described in scientific literature. When a clear trend in population parameters exists, emphasize the most recent year's data. When no clear trend exists, emphasize 3-year mean data.
- B. Harvest will be managed to allow for the take of 8% of total rams, not to exceed 50% of the estimated Class III and Class IV rams (i.e., rams \geq 6 years of age) in the population. Game Biologists will manage bighorn sheep within the guideline range.

ELK

The Department's Elk Management Goal is to maintain and, where possible, enhance elk populations at levels that provide maximum and diverse recreational opportunities, while avoiding adverse impacts to the species, its habitat, and reducing land use conflicts. Local area elk sub-plans adopted by the Commission may identify specific additional objectives.

Season prescriptions:

1. Elk hunts may be authorized for "antlered elk," "spike-only elk," or "antlerless elk." "Antlerless elk" hunts will be used where the elk population requires reduction or stabilization, or when conflicts with other land management uses exist. "Spike-only elk" seasons may be used to achieve desired bull:cow ratios when other seasons are not effective.
2. Hunts for antlered elk "any legal weapon," "muzzleloader," and "archery" seasons will begin on standard opening dates. A multiple split season structure may be implemented to reduce hunter crowding or more effectively target harvest timing. "Standard" seasons provide opportunities for hunters primarily to achieve management objectives (e.g., attain targeted bull:cow ratios), whereas "alternative" seasons provide opportunities to harvest an older age class animal.

Standard any legal weapon seasons may begin on October 22 and run for up to 15 days, begin on November 6 and run for up to 15 days, begin on November 20 and run for up to 15 days, or some combination of these seasons

Alternative any legal weapon seasons may begin on September 17 and run for up to 14 days

Standard muzzleloader seasons may begin on September 22 and run for up to 15 days.

Alternative muzzleloader seasons may begin on September 17 and run for up to 14 days

Standard archery seasons may begin on August 25 and run for up to 23 days, September 1 and run for up to 20 days, October 5 and run for 16 days, or some combination of these seasons

Alternative archery seasons may begin on September 17 and run for up to 14 days

3. Hunts for antlerless elk "any legal weapon," "muzzleloader," and "archery" seasons will begin on standard opening dates to address elk population size and distribution. Seasons may be split to reduce hunter crowding or more effectively target harvest timing.

Any legal weapon seasons may be structured to begin and end prior to or after any legal weapon seasons for antlered or spike-only elk seasons, which may extend through January to attain the harvest objectives

Muzzleloader seasons may begin on August 16 and run for up to 16 days, September 1 and run for up to 16 days, September 17 and run for 14 days, or some combination of these seasons

Archery seasons may begin on August 1 and run for up to 24 days

4. "Depredation" seasons may be used in management areas and units with no sup-plan or where the management objective is to have as few elk as possible. "Depredation" seasons are used to liberalize tag quotas and relax eligibility requirements to facilitate the most effective harvest possible.

Depredation seasons may be structured to begin and end to best meet the management objectives of the local herd

Opportunity prescriptions:

- A. Game Biologists will manage elk for the center of guideline ranges, while considering trends. The most recent 3-year mean and trend for all population indices should be used along with elk sub-plan objectives when determining tag adjustments. When a clear trend exists, emphasize last year's data. When no clear trend exists, emphasize 3-year mean data.
- B. The following table will be used when determining antlered tags for units in standard management zones. Emphasis should be placed on 3-year bull:cow and cow:calf ratios over 3-year mean hunt success. Hunt opportunity should be maximized where possible.

Standard antlered elk harvest objectives

Bull tags should	Decrease	Stay the Same	Increase
Calves:100 cows	<30	30 to 40	>40
Bulls:100 cows	<15	15 to 40	>40
Population trend	Decreasing	Stable	Increasing

Alternative antlered elk harvest objectives

Bull tags should	Decrease	Stay the Same	Increase
Calves:100 cows	<30	30 to 40	>40
Bulls:100 cows	<40	40 to 60	>60%
Population trend	Decreasing	Stable	Increasing

Antlerless elk harvest objectives

Antlerless elk harvests are used to manage elk population size, growth, and distribution. Recommendations on when to implement an antlerless harvest are based on an overall assessment of the proximity to established parameters within any applicable elk sub-plans, the range carrying capacity, competition with other uses for limited resources, or combination of the above factors. Antlerless elk recommendations must consider multiple parameters in concert with population modeling to assess herd status and develop tag quota recommendations to meet management objectives.

Parameters	No harvest	Light harvest	Harvest
Five-year population trend (observed)	Stable	Stable or declining	Increasing
Calf to cow ratio (three-year trend)	Stable or increasing	Stable or declining	Increasing
Proximity to carrying capacity	Below	Above	Below
Body condition	Moderate	Poor to moderate	Good
Estimated population size	<500	500 to 5,000	>5,000
Depredation issues	None	Few	High
Drought conditions or habitat damage	None or little	Severe	None or severe
Targeted harvest percent of adult population	0%	2 to 4%	>5%
Increase hunter opportunity	Youth	Youth and general	Youth and general

Private land incentive tags

Private land incentive tags will be handled in accordance with NAC 502.42279.

MOUNTAIN GOATS

- Units may be subdivided into smaller hunt units to prevent hunters concentrating in specific areas within mountain ranges or to encourage hunting within areas with available rams that may be avoided because of access difficulty.
- All hunts will be "any legal weapon" seasons.

3. Mountain goat seasons for "any mountain goat" will begin and end on standard season dates, running September 1 through October 30.

Opportunity prescriptions:

- A. Hunt recommendations should be developed using estimated populations based on survey protocols and sighting rates described in scientific literature. When a clear trend in population parameters exists, emphasize the most recent year's data. When no clear trend exists, emphasize 3-year mean data.
- B. Harvest will be managed to allow for the take of 2–5% of the total population. Game Biologists will manage mountain goats within the guideline range.

MOUNTAIN LION

The Department's Lion Management Goal is to manage the mountain lion population, its numbers, and distribution, as an important part of Nevada's fauna while providing mountain lion hunting and other recreational opportunities.

Season prescriptions:

1. Hunt recommendations will be made on a unit, zone (grouping of biologically similar units), or regional basis with established harvest limits.
2. Mountain lion hunts may be authorized for "either sex" seasons, except that spotted kittens or females accompanied by spotted kittens may not be taken.
3. Hunts for either sex mountain lion "any legal weapon" seasons will occur on standard opening dates.

Any legal weapon seasons may begin on March 1 and run through end of February

Opportunity prescriptions:

- A. Game Biologists will manage mountain lion harvest by examining population trends and harvest characteristics and establishing appropriate harvest limits by unit, zone, or region.

MULE DEER

The Department's Mule Deer Management Goal is to maintain and, where possible, enhance deer populations at levels that provide maximum and diverse recreational opportunities, while avoiding adverse impacts to the species and its habitat.

Season prescriptions:

1. Generally, hunting seasons are for "antlered mule deer" or "antlerless mule deer" that do not overlap in season dates. "Either sex" tags are issued to junior hunters in accordance with NAC 502.063. "Antlerless mule deer" hunts are used when deer populations require reduction or stabilization, whereas "antlered mule deer" hunts are used to manage the ratio of males to females in the population while maintaining a healthy deer herd.
2. Hunts for antlered mule deer "any legal weapon," "muzzleloader," and "archery" seasons typically follow a progression from late summer (archery), mid-autumn (muzzleloader) to late autumn months (Any legal weapon). Seasons may be split to reduce hunter crowding or more effectively target harvest timing. Early seasons provide greater opportunity to draw a tag and are primarily designed to achieve management

objectives (e.g., attain targeted buck:doe ratios), whereas "late" seasons provide opportunities to harvest an older age class animal and typically have reduced quotas compared to early season hunts.

One season hunts for "any legal weapon" class hunts typically begin on October 5 and run for up to 31 days

If split seasons are implemented, early season hunts typically begin on October 5 and run for up to 16 days, followed by a second "late" any legal weapon season that may begin on October 21 and run for up to 16 days. In some management areas where hunter crowding may become an issue a third season is implemented and generally runs from mid-October to the end of October.

Additional one season "late" hunts are structured to harvest migratory deer herds which arrive in Nevada after the breeding season and typically begin in November or December.

Muzzleloader seasons usually begin on September 10 and run for 21 days. Some "late" season hunts are structured around migratory deer from adjacent states or to provide opportunity for harvesting an older class deer with limited quotas.

Some limited muzzleloader seasons begin in November or December and run for up to 21 days

Generally archery seasons begin on August 10 and run for up to 31 days

Some late season archery hunts begin in November or December and run for up to 31 days primarily to capitalize on migratory deer herds that cross state boundaries.

3. Hunts for antlerless mule deer "any legal weapon" seasons are used to address mule deer population size, herd health, and range conditions.

Any legal weapon "antlerless" seasons are structured to meet the management objectives of the local herd while still considering "antlered" hunting seasons and timing of annual surveys as the top priorities. Typically, antlerless seasons begin in mid-October and conclude at the end of October; however some seasons start in November and run up to 15 days.

4. Junior hunts are structured to provide statewide tag numbers equivalent to at least the number of junior tag applicants for the previous year.

Junior antlered or antlerless seasons coincide with the any legal weapon season, the muzzleloader season, and the archery season dates for the unit in which the hunt is adopted

Opportunity prescriptions:

- A. Game Biologists manage mule deer for a range of hunting opportunity, while considering population performance and trends. The most recent 3-year mean or trend in buck:doe ratios and fawn:doe ratios are considered when determining antlered hunt recommendations. For all parameters, emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists. Hunting opportunities are distributed following Commission Policy 24 and are based on equitable allocation of tags among various weapon types.
- B. Population modeling is typically used to assist Game Biologists in assessing the magnitude of change in tag quota recommendations needed to achieve management objectives. Population trends are inferred from observation rates from standardized helicopter surveys.
- C. In general, tag quotas will be adjusted to achieve the following management objectives for mule deer:

Standard mule deer harvest objectives

Parameters	Decrease	No change	Increase
Fawns:100 Does	<40	40 to 50	>50
Bucks:100 Does	<25	25 to 35	>35
Hunt Success	<30%	30 to 40%	>40%
Population Trend	Decreasing	Stable	Increasing

Late season mule deer harvest objectives

Late season mule deer hunts are designed to meet the objective in the statewide mule deer management plan to provide opportunity for older-age class deer. These guidelines result in shorter late-season hunts with more conservative quotas and provide greater opportunity to harvest an older age class buck. Quotas are reduced when the 3-year mean is below guidelines or when a downward trend in hunter success falls below accepted guidelines.

Antlerless mule deer harvest objectives

Antlerless mule deer harvests are used to manage mule deer population size, growth, and future conditions of the range. Recommendations on when to implement an antlerless harvest are based on an overall assessment of the range carrying capacity, trends in fawn:doe ratios, body condition of deer either captured or harvested, or a combination of the above factors. Antlerless recommendations consider multiple parameters in concert with population modeling to assess herd status and develop tag quota recommendations to meet management objectives.

Parameters	No harvest	Light harvest	Harvest
Five-year population trend (observed)	Stable	Stable or declining	Increasing
Fawn to doe ratio (three-year trend)	Stable or increasing	Stable or declining	Increasing
Proximity to carrying capacity	Below	Above	Below
Body condition	Moderate	Poor to moderate	Good
Targeted harvest percent of adult population	0%	2 to 5%	6 to 10%
Increase hunter opportunity	Youth	Youth and general	Youth and general

Private land issues

Issues involving private land depredation issues are managed in accordance with NAC 502.424.

SMALL GAME AND FUR-BEARERS

The Department's Upland Game Management goal is to provide as much upland game hunting opportunity as possible. Seasons will be designed to allow standardization and simplification of hunt regulations, better distribution of hunters, and the opportunity to hunt more than 1 species at the same time.

GREATER SAGE-GROUSE

1. Hunting seasons for sage-grouse should be based on careful assessments of population size and trends.
2. If populations occur over relatively large geographic areas and are stable to increasing, seasons and bag limits can be relatively liberal (2- to 4-bird daily bag limit and a 2- to 5-week season) for hunting seasons allowing firearms.
3. If populations are declining (for 3 or more consecutive years) or trends are unknown, seasons and bag limits should be generally conservative (1- or 2-bird daily bag limit and a 1-to 4-week season) for hunting seasons allowing firearms, or suspended (for all types of hunting, including falconry and Native American subsistence hunting) because of this species' population characteristics.
4. Where populations are hunted, harvest rates should be $\leq 10\%$ of the estimated fall population to reduce negative effects on the subsequent year's breeding population.
5. Populations should not be hunted where < 300 birds comprise the breeding population (i.e., < 100 males are counted on leks).

WILD TURKEY

1. Wild turkey spring seasons will be for "bearded turkey" only.
2. Wild turkey fall season may be for "any" turkey.
3. Spring seasons will be established to begin on March 28 and run up to May 3. Season dates may be adjusted or split to avoid hunter crowding or conflicting land uses.
4. Spring turkey seasons will end at 4:00p each day.
5. Fall seasons may be established if population size, access, and hunter densities may be adequately addressed.

OTHER SMALL GAME

1. Upland game seasons will be open statewide when feasible.

California, Gambel's, and mountain quail, and chukar and Hungarian partridge season will open on October 10 run through February 7
Blue (dusky and sooty) and ruffed grouse season will open on September 1 and run through December 31
Cottontail and pygmy rabbits and white-tailed jackrabbit seasons will open on October 10 and run through February 28
Pheasant season will open on November 1 and run through November 30; seasons will allow for the harvest of "cocks" only
Snowcock seasons will open on September 1 and run through November 30
A two-day youth season for chuck and Hungarian partridge, California and Gambel's quail, cottontail and pygmy rabbits, and white-tailed jackrabbits will be held annually in late September
2. Migratory game bird seasons and bag limits will be set by the Commission annually according to Migratory Bird Treaty Act and Pacific Flyway guidelines.

FUR-BEARERS

The Department's fur-bearing mammal management objectives are to maintain present range, distribution, and population levels in Nevada; and to allow for the maximum recreational, economic and aesthetic uses commensurate with existing populations statewide. Fur-bearer seasons will be set for a 2-year time period. Seasons and season dates will be reviewed by the commission.

Season prescriptions:

Population estimates for some of the more common furbearer species (beaver, kit fox, gray fox) harvested in Nevada have been generated by using USGS GAP analysis data. GAP data uses maps that delineate topographical, biological, and geological features to identify various habitats. GAP data for each species is paired with habitat suitability models that specify known habitat requirements. This process provided the Department with maps indicating available statewide habitat for each of the species. The GAP data is then used in conjunction with biological density and home range data for each species to generate population estimates. Density and home range data were derived from research data either in Nevada, or in the absence of Nevada research, from nearby states (Utah and California) with similar habitat types. Population estimates and estimated harvest rates based on expanded trapper harvest data will be compared annually. If harvest of any of those species is estimated to be in excess of 10% of the estimated population, the Department will recommend restricting harvest.

BOBCAT

The Department's bobcat management objectives are to sustain a healthy bobcat population within existing suitable habitat and provide quality recreational opportunities for bobcat harvest. Bobcat seasons will be set for a 2-year time period.

Season prescriptions:

1. Maintain or return to the standard season strategy if at least 2 variables (3-year average) are within the historical 95% confidence interval, or if 1 variable is above, 1 below, and 1 within the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Standard season \approx 94 days (Last Saturday in November and running through last day in February).

2. Initiate a restrictive season if 2 or more variables fall below the historic 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Restrictive season \approx 64 days (December 15 running through the third Saturday in February).

3. Initiate a liberal season if ≥ 2 variables are above the historical 95% confidence interval. Emphasize last year's data when a clear trend exists or emphasize the most recent 3-year mean data when no clear trend exists.

Liberal season \approx 120 days (November 1 running through the last day in February).

4. During any period if the 3-year average of harvest falls below the low historical range (1989) AND the 3-year average of individuals reporting bobcat harvest drops below the low historical range (209), the season will default to the liberal season until either of these 2 variables increases to within the historical range. Then, the standard season prescriptions will be followed.

Historical 95% confidence limits

Variable	Mean	95% confidence interval
Kitten production (kittens/100 females)	66	57–75
Adult male to adult female ratio (males/ 100 females)	141	137–146
Harvest effort (trap nights/bobcat harvested)	171	159–183