

Harvest Management Guidelines for Hunting Seasons in Nevada

Review and Recommendation

Concept and Process

- Initiated in August 2015
- Team approach, cross-divisional involvement
- Following slides from initial presentation



Guidelines Team



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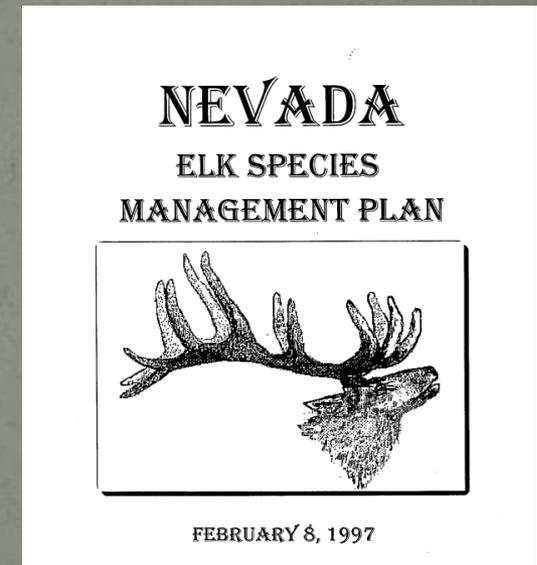
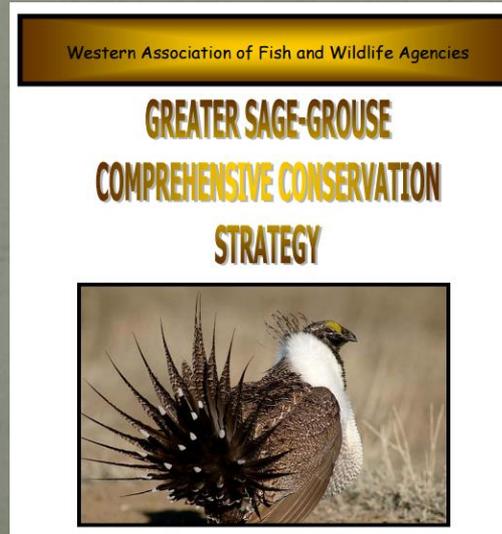
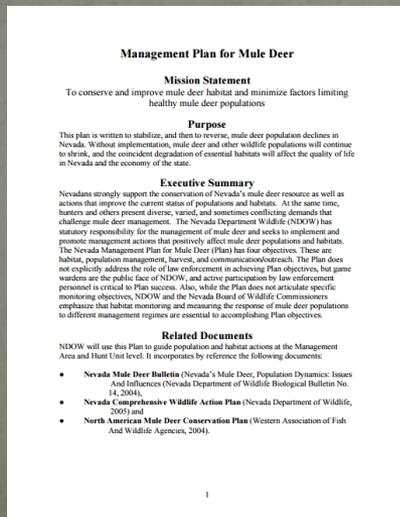
☞ Mike McCusker

Harvest Guidelines

- Not new, manage by objective
- Reexamine objectives for which we manage, consolidate
- Review scientific literature
- Comparative data from surrounding states
- Stakeholder and public opinion
- Process
- Benefits

Where are our management objectives?

- Federal Regulation – NRS – NAC
- Elk plans and sub-plans
- Mule deer management plans
- Season setting
- Other documents



Reexamine and consolidate

- Some objectives are somewhat dated
- Objectives can be difficult to locate
- Is there new information?
- Should we consider new approaches?
- Reinventing wheels and building better mousetraps



What have we collectively learned?

- Differences between researchers and managers
- Essential to recognize everyone's biases and work collectively
 - WAFWA, AFWA, Universities, and agency research
 - Game biologists and managers
- Are there better ways to survey?
- Are there better ways to monitor harvest?
- What does harvest monitoring tell us?
- What is currently missing?
 - Antlerless harvests?
 - Management range for specific components; ratios?

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Original Article

Effects of Male-Biased Harvest on Mule Deer: Implications for Rates of Pregnancy, Synchrony, and Timing of Parturition

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ABSTRACT Evaluating how management practices influence the population dynamics of ungulates may enhance future management of those species. For example, in male deer (*Odocoileus americanus*), changes in male/female ratio due to male-biased harvest may alter rates of pregnancy, timing of parturition, and synchrony of parturition if inadequate numbers of males are present to fertilize females during their first estrous cycle. If rates of pregnancy or parturition are influenced by decreased male/female ratios, recruitment may be reduced (e.g., fewer births, later parturition resulting in lower survival of fawns, and a less synchronous parturition that potentially increases susceptibility of neonates to predation). Our objectives were to compare rates of pregnancy, synchrony of parturition, and timing of parturition between exploited mule deer populations with a relatively high (Piceance, CO, USA; 26 males/100 females) and a relatively low (Moose, UT, USA; 14 males/100 females) male/female ratio. We determined rates of pregnancy via ultrasonography and timing of parturition via vaginal implant transmitters. We found no differences in rates of pregnancy (98.6% and 96.6%; $z = -0.821$; $P = 0.794$), timing of parturition (estimate = 1.258; SE = 1.672; $t = 0.752$; $P = 0.454$), or synchrony of parturition ($F = 1.071$; $P = 0.859$) between Moose Mountain and Piceance Basin, respectively. The relatively low male/female ratio on Moose Mountain was not associated with a protracted period of parturition. This finding suggests that relatively low male/female ratios typical of heavily harvested populations do not influence population dynamics because recruitment remains unaffected. © 2014 The Wildlife Society

Comparative Data

- We work closely with neighboring states on many issues
- We can learn from other states, we pool collective knowledge
- What are their experiences
 - License simplification?
 - Regulation simplification?
 - Hunter demographics?
 - Human dimensions?
- Recognize that each state has unique conditions and publics

Stakeholder and Public Opinion

- Public trust doctrine and roles
 - Established through 1842 US Supreme Court case
 - C. A. Smith 2011 – Role of state wildlife professionals under the public trust doctrine
 - PTD first codified in the Magna Carta – 800 years ago
- Gaining knowledge of what stakeholders and public want
- Not everyone wants a 65 inch TV
 - Segmented public
 - Nevada does many things well
- Biological sideboards and social sideboards
 - Alternative management?
 - Financial implications?



Process

- Consolidate existing objectives into a single document
- Review scientific literature
- Obtain comparative data from other states
- Share information with public and seek feedback
- Share update with Commission in November workshop
- Review, revise, and update
- Provide Commission with *Guidelines for Harvest Management in Nevada...*

Benefits

- Biologists
 - Public trust managers
 - Clear direction, simplification, streamline
 - Identification of when recommendations differ from guidelines
 - Periodic review and revision
- Commission
 - Trustees of public trust
 - Provides public feedback
 - As a guideline, allows flexibility
 - Periodic review and revision

Benefits

- CABs
 - Input
 - Better understanding of targets
 - Period review and revision
- Public
 - Provide feedback
 - Better understanding of targets
 - Periodic review and revision
 - Simplification
 - Standardization

What it won't do

- Eliminate differences of opinion
 - It will provide a venue for honest dialogue about the benefits and challenges
- Eliminate challenges to North American Model
 - Model will continue to evolve...

Public input

- Provided Commission briefing in November 2015 on progress and input
- Based on input, crafted survey for those that purchase hunting licenses.
- Throughout, seek input from those that engage in hunting, but accept comment from all that are interested in hunting.
- No one excluded from process.

Update on activities

- August 8, 2015 – Commission briefing
- August–September – Data gathering and compilation of DRAFT
- October 20, 2015 – Media release and E-Blast regarding Town Hall meetings and availability of DRAFT
- October 20, 2015 – KKOH radio
- October 28, 2015 – Las Vegas Review-Journal
- November 2–6, 2015 – Town Hall meetings for agency and public in Reno, Las Vegas, Ely, Elko, and Winnemucca; attended by about 70 agency and 95 public
- November 4, 2015 – Letter to the editor on Reno Gazette Journal
- November 9, 2015 – Article in Winnemucca Buckaroo News
- Posted on several social media sites (Nevada Muleys, Eastman's, Mule Deer Foundation)

Input

- Comments summarized from meetings (13 pages)
- Written comment (22 public, 3 agency)
- Specific discussion at Carson CAB meeting on November 9, 2015
- Posted as support material on November 10, 2015
- Noticed to CABs and Commission of posting on November 10, 2015
- Distributed to attendees of Town Hall meetings that provided email addresses on November 10, 2015
- Distributed link to support material to attendees of Town Hall meetings that provided email addresses on November 12, 2015

Questionnaire

- Released in March 2016
- Reviewed by professional human dimensions company
- Sent to 2,200 randomly selected hunting or combination license holders
- 36% response rate (786 returns)
- Provides $\pm 4\%$ accuracy (similar to political polling)

Results

- 57% classify themselves as primarily or mostly a big game hunter
- 32% classify themselves as both a big and upland game hunter
- 7% classify themselves as primarily or mostly an upland game hunter

Results

- 88% had not previously heard of Draft Harvest Guidelines
- 61% had not heard of County Advisory Boards
- 93% had not attended a Commission meeting in the last 3 years
- 72% had hunted in Nevada within the last 3 years
- 53% had assisted someone else on a hunt in Nevada within the last 3 years

Results

- When asked specifically about hunter crowding on their last hunt, 69% of respondents reported crowding was not an issue
- When asked if season should be shortened and number of seasons increased to reduce crowding, 53% of respondents disagreed or strongly disagreed

Results

- When asked if seasons should be as long as possible so that hunters can select when to go afield, 51% agreed or strongly agreed
- If we are trying to reduce elk populations, should antlerless hunters be allowed a second tag – 44% agreed, 44% disagreed (more people agreed that disagreed, but more people strongly disagreed than strongly agreed)

Results

- If we are trying to eliminate an elk population where it is unwanted, 73% of respondents agreed or strongly agreed with offering tags over the counter in unlimited numbers

Results

- **NDOW should strive for consistency in opening and closing dates for seasons:**
 - Deer – 66% of respondents agreed or strongly agreed
 - Elk – 50% of respondents agreed or strongly agreed (16% expressed no opinion)

Further implementation delayed

- License simplification
- Competing public demands
- Competing work loads

August CAB Workshop

- Comparison of updated and existing guideline documents
- Request for input



Objectives



- ❧ Streamline
- ❧ Simplify
- ❧ Standardize
- ❧ Reduce confusion
- ❧ Increase value for internal customers (biologists) and external customers (Commission, CABs, and public)
- ❧ Increase understanding of rationale



Sideboards



- ❧ Department recommendation
 - ❧ Within biological sideboards
- ❧ Public and CAB input
 - ❧ Social sideboards
- ❧ Commission approval
 - ❧ Guidelines, not CR or CGR, therefore not binding
 - ❧ Commission may choose to approve a recommendation outside of guidelines, but Department will inform if believed to be beyond biological sideboard
 - ❧ Any recommendation from agency beyond guidelines will be identified and explained



Clarity on Objectives



- ❧ Not changing objective
 - ❧ We can change it, but do so following process
- ❧ May change how we measure objectives



Examples



- ❧ Mule deer
- ❧ Buck to doe ratio – 30:100
 - ❧ Measured in fall after the hunt
 - ❧ We have data collected during appropriate survey period with confidence intervals
- ❧ No change to criteria
 - ❧ Challenge to get data during appropriate survey period in all areas
 - ❧ Process challenge, not relevant to guidelines



Examples



- ❧ Antlerless harvest
 - ❧ Rationale is more obscure and more poorly articulated
- ❧ Define population size and conditions under which agency will recommend

Examples



Elk

Bull to cow ratio objective

- Measure at time of year to reduce conflicts and see most elk, but does not correspond to best survey period
- Measured ratios are inaccurate, modeled ratios dramatically higher
- Influenced by attempt to manage population objectives



Examples



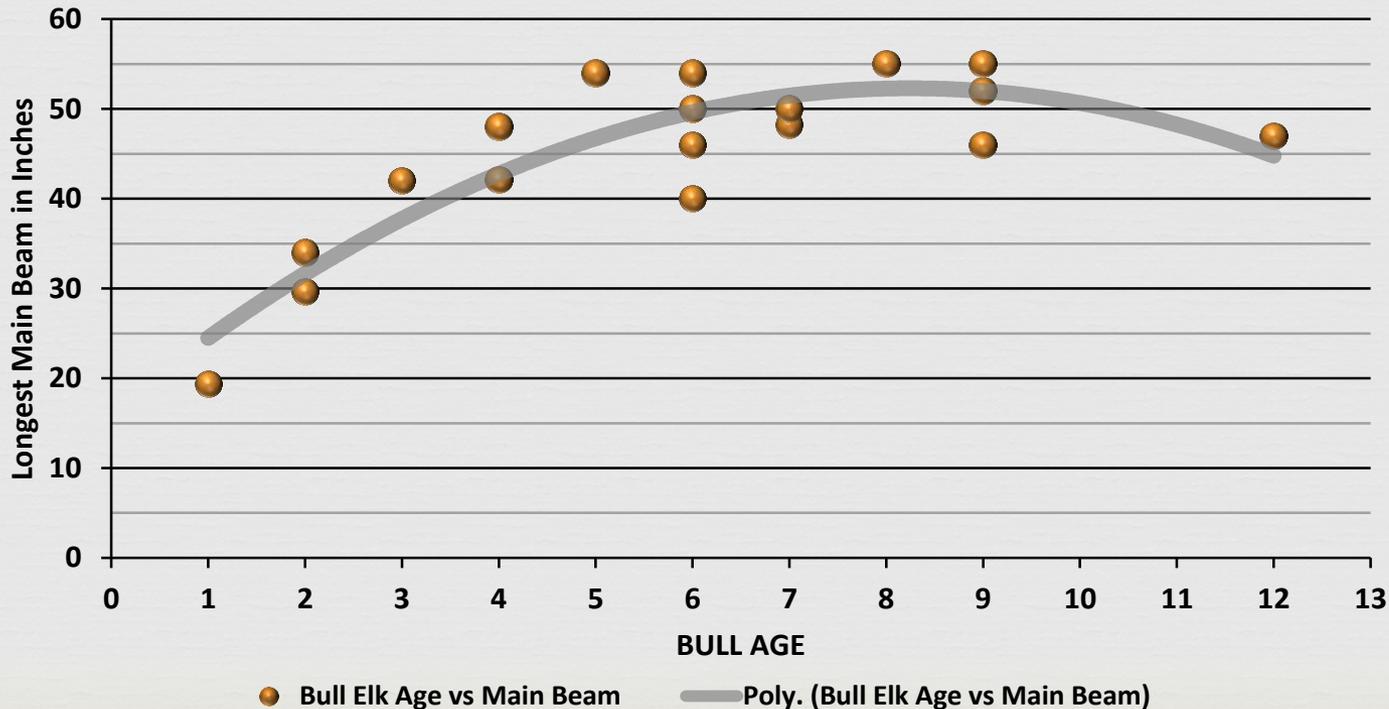
- ❧ Alternative ways to obtain same objective
- ❧ Population characteristics and harvest characteristics
- ❧ Bull elk main beam length

Examples



🌀 Bull elk main beam length:

2015 Unit Group 108, 131, 132 Bull Age vs Antler Length

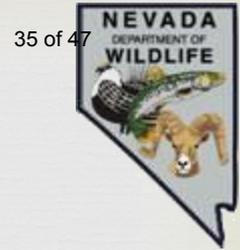




Examples



- ❧ Bull elk harvest should comprise 25–35% ≥ 50 inch main beam length
 - ❧ Consistent with current data
 - ❧ Independent of ratio



Other Changes



❧ Pronghorn

- ❧ Buck to doe ratios focus on ≥ 2 year old bucks
- ❧ Specify doe hunt objectives

❧ Bear

- ❧ No changes

❧ Bighorn sheep

- ❧ Specify ewe hunt objectives

❧ Mule deer and elk

- ❧ Alternative units
- ❧ Standardize season dates



Other Changes



❧ Mountain lion

- ❧ Statewide objective

- ❧ Monitor on genetic population structures identified in research

- ❧ Monitor harvest characteristics

❧ Mountain goats

- ❧ No change

❧ Upland game and furbearers

- ❧ No substantive changes

- ❧ Clarify management objectives used for bobcat



Next Steps



- ❧ Five public meetings
 - ❧ Ely – August 24
 - ❧ Elko – August 25
 - ❧ Winnemucca – August 26
 - ❧ Las Vegas – September 6
 - ❧ Reno – September 7



Next Steps



- ❧ Briefing of Commission with public feedback in September
 - ❧ Potential revisions
- ❧ Final recommendation to Commission in November
- ❧ Following adoption, seasons will be implemented in January and quotas in April in accordance with these guidelines

Following August Workshop

- August 19 – transmitted to CABS memo describing intent, press release, public meeting schedule, and current draft guidelines
- August 24-26 and September 6-7, 5 public meetings in Elko, Ely, Winnemucca, Las Vegas, and Reno
- 80 attendees, public input

Following August Workshop

- Team met to review input and consider revisions during September 20-21
- Updated version
- Revisions in track changes
- Some errors remain

Errata

○ Mule deer

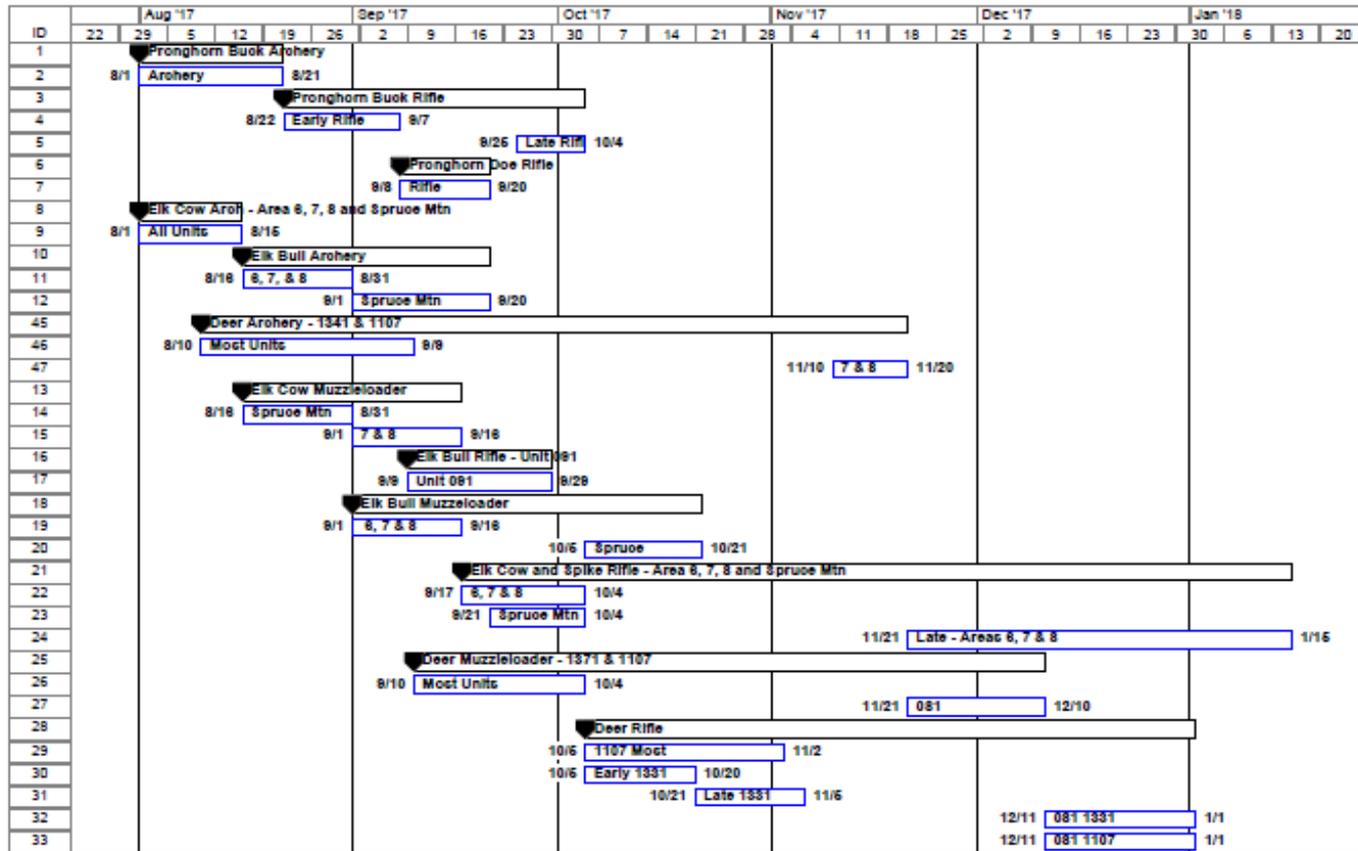
- 114, 115 should have muzzleloader season during November 10-30
- 115 should not have non-standard season during December 1-15

○ Elk

- 241, 242 treated inconsistently and need further attention in regards to archery seasons

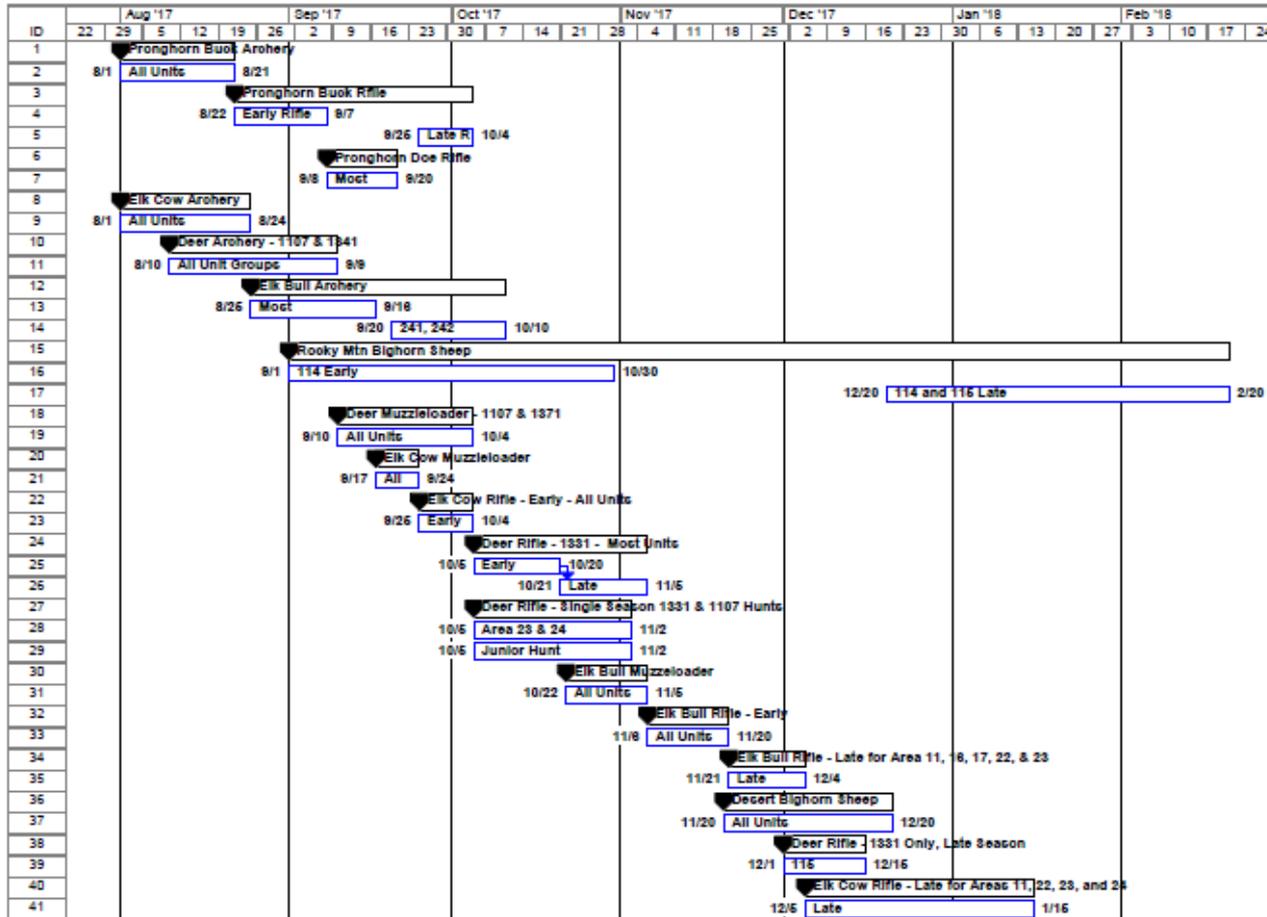
Season Structures

Proposed 2017 Elko County Big Game Seasons



Season Structures

2017 Proposed White Pine & Lincoln County Big Game Seasons



Public input

- You have copies of all written
- Many attendees in Las Vegas and Reno expressed opposition to bear hunt
 - Emphasize science vs social
- Many perspectives
 - Two letters from HSUS, nomenclature on guidelines
 - Hunter letter requesting more tags
 - Range of perspectives, not proportion

Next Steps

- ◉ Discussion today on current draft, direction from Commission
- ◉ Based on feedback (Commission and internal accuracy review), revise and update during October
- ◉ Post with new track changes (with September version as well) as support
- ◉ Request Commission adoption in November

Next Steps

- Use these guidelines to formulate hunting season and quotas for the next 4 years
- Remember, guidelines are not binding
 - Not CR or CGR
 - CABs may suggest other considerations
 - Commission may adopt seasons or quotas that differ
 - Department will describe rationale for any season we recommend that is not consistent with guidelines

Questions – Direction
