**State Predatory Animal and Rodent Committee**
**Meeting Notice & Agenda**
Wednesday, February 26, 2025, 11:00 A.M

Nevada Department of Agriculture

**Meeting location**: **Microsoft TEAMS Meeting**

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Nevada Department of Agriculture
2300 E St. Louis Ave
Las Vegas, NV 89104
775-668-4590

Nevada Department of Agriculture
4780 E Idaho Street
Elko, NV 89801
775-753-1360

**Public Notice**

*Below is an agenda of all items to be considered.* ***Action may be taken on items preceded by an asterisk (*).*** *Denotes possible closed session (**). Items on the agenda may be taken out of the posted order, items may be combined for consideration; and items may be pulled or removed from the agenda at any time at the discretion of the Chairperson. Unless noted as an action item, discussion of any item raised during a report or public comment is limited to that necessary for clarification or necessary to decide whether to place the item on a future agenda. Public comment may be limited to three minutes per person at the discretion of the chairperson.*

*Reasonable efforts will be made for members of the public who have disabilities and require special accommodations for assistance at the meeting. Please call 775-353-3755.*

**State Predatory Animal and Rodent Committee**
**Meeting Notice & Agenda**
Wednesday, February 26, 2025, 11:00 A.M

Nevada Department of Agriculture

*Notice of this meeting was posted on or before 9:00 a.m. on the third working day before the meeting at the following locations: Nevada Department of Agriculture, 405 S. 21st Street, Sparks, NV 89431, Nevada Department of Agriculture, 2150 Frazer Ave., Sparks, NV 89431, Nevada Department of Agriculture, 4780 E. Idaho Street, Elko, NV 89801, Nevada Department of Agriculture, 2300 St. Louis Ave., Las Vegas, NV 89104.*

*Copies of the agenda, supporting documentation and meeting minutes are available, at no charge, at the Department of Agriculture website at www.agri.nv.gov or www.notice.nv.gov or by visiting Nevada Department of Agriculture, 405 S. 21st St., Sparks, NV 89431, attention Executive Assistant.*

**AGENDA**

1. **Open meeting-call meeting to order by Chair Cody Krenka**
   a. Pledge of Allegiance
   b. Roll call

2. **Public Comment**

3. **Minutes**
   a. *Approval of February 12, 2024, committee meeting minutes ***(for possible action)***

4. **Committee Business**
   a. *Committee selection of new Chair for 2025, per NRS 567.040 ***(for possible action)***
   b. *Committee selection of new Vice Chair for 2025, per NRS 567.040 ***(for possible action)***
   c. *Nevada Department of Wildlife FY2026 Predator Control Plan presentation and coordination of submission of comments – Joe Bennett, Nevada Department of Wildlife ***(for possible action)***
   d. NDA program update – ***(for information)***
   e. Progress update on Predatory Animal and Rodent Committee and USDA Wildlife Services programs – Mark Ono, State Director, Nevada USDA-APHIS-WS ***(for information)***
   f. Meeting schedule 2026 discussion ***(for information)***

5. **Public Comment**

6. **Adjournment**

# Predatory Animal & Rodent Control Committee Meeting Minutes
# Monday, February 12, 2024, 11:30 A.M.
Division of Animal Industry

Nevada Department of Agriculture

**Meeting location**:

**Nevada Department of Agriculture**
405 S. 21st Street
Sparks, NV 89431
775-353-3601

**Video conference:**

**Nevada Department of Agriculture**
405 S. 21st Street
Sparks, NV. 89431
775-353-3601

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## Public Notice

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Assistant.

**AGENDA**

1. **Open meeting-call meeting to order by Chair Cody Krenka**
   a. Pledge of Allegiance
   b. Roll call

Committee members: Dr. Ihsan Azzam, Bernard Petersen, Jim Puryear, Cody Krenka, Darrell Pursel.
Sparks staff: Doug Farris, Julia Ketcham, Will Dawson, Dr. J.J. Goicoechea, Chad Sestanovich, Ciara Ressel
Guests: Pat Jackson (NDOW), Shawn Espinosa (NDOW), Richard Yien (DAG), Mark Ono (USDA)

2. **Public Comment**
None.

3. **Minutes**
   a. *Approval of February 2, 2023 committee meeting minutes ***(for possible action)***

Bernard Petersen moved to approve the February 2, 2023 meeting minutes. Jim Puryear seconded this motion. The motion passed.

4. **Committee Business**

   a. *Committee selection of new Chair for 2024, per NRS 567.040 ***(for possible action)***

Cody Krenka motioned to have Darrell Pursel take Chair position. Bernard Petersen seconded this motion. The motion passed. Darrell Pursel asked that Cody Krenka run remainder of meeting.

   b. *Committee selection of new Vice Chair for 2024, per NRS 567.040 ***(for possible action)***

Darrell Pursel nominated Cody Krenka as Vice Chair. Bernard Petersen seconded the motion. The motion passed.

   c. *Nevada Department of Wildlife FY2025 Predator Control Plan presentation and coordination of submission of comments – Pat Jackson, Nevada Department of Wildlife (NDOW) ***(for possible action)***

No notable changes made.

Jim Puryear had questions regarding the management of mountain lions on the Sheldon. Pat Jackson, staff specialist for NDOW, answered that, when able to capture lions, NDOW will use project 46 to capture and deploy GPS transmitters on mountain lions to increase understanding. Due to the ridged requirements for capture techniques, there have been no mountain lions captured.

Bernard Petersen asked if the area surveys of mule deer population is showing positive impacts and growth. Pat Jackson notes in various public meetings that NDOW is not always set up to make inferences on whether control is really working or not making those findings muddy.

Bernard Petersen made a motion to accept the plan as written and to be forwarded to Wildlife Commission. Darrell Pursel seconded the motion. The motion passed.

d. *NDA Program Update: Doug Farris – now NDA Deputy Director; appointment of Chad Sestanovich, Administrator, Division of Animal Industry; appointment of Will Dawson, Deputy Administrator, Division of Animal Industry.

Budget account 4470 Dairy fund update of bird nuisance control. At the request of the industry, producers and cooperating partners to streamline practices and response times. In December, Director Goicochea allocated $10,000 in funding to purchase DRC-1339 through the assistance of USDA Wildlife Services acceptance and storage of product at their facility. An additional $10,000 has been requested for purchase of DRC-1339 and assistance from USDA Wildlife Services acceptance and storage of product at their facility.

No comments or questions.

e. *Progress update on Predatory Animal and Rodent Control program by USDA Wildlife Services, Mark Ono. ***(for information)***

Fallon position for NDA / Wildlife Services is open for recruitment.

Grazing boards have provided $102,100 to the Wildlife Services Program which is a significant contribution to aviation program.

Warmish winters have increased Starlings and they are being eradicated with assistance from NDA's purchase of DRC-1339.

f. *Meeting schedule discussion ***(for information)***

Committee discussed holding 2025 meeting as soon as possible after the NDOW Board meeting being held January 2025 – dates for this meeting have not been announced yet.

5. **Public Comment**

No comments submitted

6. **Adjournment**

Meeting adjourned at 12:12pm

# Nevada Department of Wildlife

# Predator Management Plan

***DRAFT***

**Fiscal Year 2026**
**July 1, 2025 – June 30, 2026**

# State of Nevada

Joe Lombardo, Governor

## Department of Wildlife

Alan Jenne, Director

## Game Division

Shawn Espinosa, Administrator

**Board of Wildlife Commissioners**

| | |
|---|---|
| Shane Rogers, Chairman | Las Vegas |
| Paul Young, Vice Chairman | Reno |
| Tom Barnes | Elko |
| Eddie Booth | Winnemucca |
| Shane Boren | Lund |
| Tommy Caviglia | Henderson |
| Casey D. Kiel | Lovelock |
| David McNinch | Reno |
| Mario Walther | Yerington |

# Table of Contents

Introduction

The Nevada Department of Wildlife (NDOW) maintains a philosophy that predator management is a tool to be applied strategically with specific objectives in mind. For the purposes of this plan, predator management includes lethal removal of mammalian predators and corvids. Pursuant to changes made to NRS 502.253 (1) (b) during the 82nd session of the Nevada State Legislature through Assembly Bill 70 (AB-70), a "non-lethal" apportionment of funds identified annually by big game and turkey tag applicants will be made available for habitat, research, and management (HRM) to benefit non-predatory game species. These funds will be distributed and reported on through a process similar to, and concurrent with, the Wildlife Heritage Account annually and are not reflected in this plan.

NDOW intends to use predator management actions thoughtfully, with clear goals and management actions based on objective scientific principle and analysis of resulting data. To be effective, predator management should be applied with proper intensity and at a focused scale. Recognizing the variability in nature, projects should be monitored to the extent practicable to determine whether desired results are achieved. This approach is supported by the scientific literature on predation management. NDOW is committed to using all available tools and all relevant science, including strategic use of predator management, to preserve our wildlife heritage for the long-term.

NDOW is a state agency that must balance the biological needs of wildlife and statutory mandates. As mentioned above, but more specifically, AB-70 amended NRS 502.253 to read:

1) a fee of $3 must be charged for processing each application for a game tag, the revenue from which must be accounted for separately, deposited with the State Treasurer for credit to the Wildlife Account in the State General Fund and used by the Department, at the direction of the applicant, for costs related to:
    a. Developing and implementing an annual program for the lethal removal of predatory wildlife; or
    b. Developing and implementing an annual program for the improvement of wildlife habitat and research or management activities beneficial to non-predatory game species.

The $3 game tag application fee from the 2024 game application period totaled $1,095,252. During that process, approximately 66 percent was identified for lethal removal of predatory wildlife ($722,141) while 34 percent ($373,111) was identified for HRM projects.

Budget Summary

Proposed predator projects for fiscal year 2026 include $614,000 for lethal work. Revenues from 2025 game tag applications are estimated to be similar to 2024 at approximately $722,141. Taking this estimate into consideration, an anticipated carryforward of approximately $326,650 in reserve is expected. The purpose of the reserve account is to account for volatility from AB 70 in how people select where their 3-dollar fee will be allocated. For instance, the 2024 game application period had 64% of applications electing for lethal removal and 36% choosing HRM. These percentages are expected to fluctuate from year to year to some extent. Our goal is to establish a

balance in excess of $750,000 by Fiscal Year 2028 so cash flow is adequate to fund approved projects adequately.

## TYPES OF PROJECTS

Below are the three categories of projects identified within this plan. Some projects have aspects of multiple types within a single activity or action. The project types are listed throughout this document.

1. **Implementation**: The primary objective is to implement management of predators through lethal or non-lethal means. NDOW will collaborate with USDA Wildlife Services and private contractors to conduct lethal and non-lethal management of predators. Identifying and monitoring a response variable is not a primary objective for implementation.
2. **Experimental Management**: The primary objectives are management of predators through lethal or non-lethal means and to learn the effects of a novel management technique. NDOW will collaborate with USDA Wildlife Services, private contractors, and other wildlife professionals to conduct lethal or non-lethal management of predators and will put forethought into project design. Response variables will be identified and data will be collected in an attempt to determine project effectiveness. Expected outcomes will include project effectiveness, agency reports, and possible peer-reviewed publications.
3. **Experimentation**: The primary objective is for increasing knowledge of predators in Nevada. NDOW may collaborate with other wildlife professionals to study and learn about predators of Nevada. Expected outcomes will include agency reports, peer-reviewed publications, and information on how to better manage Nevada's predators.

## Project 21: Greater Sage-Grouse Protection (Common Raven Removal)

| | |
|---|---|
| Justification | This project proposes to lethally remove Common Ravens (*Corvus corax*, hereafter "ravens") from known Greater sage-grouse (*Centrocercus urophasianus*, hereafter "sage-grouse") habitat. Raven predation on sage-grouse nests and broods can limit population growth. Ravens will be removed around known sage-grouse leks because most nest sites are located within 5 km of lek sites. Ravens will be removed in areas of known greater abundance to benefit sensitive populations of sage-grouse. |
| Project Manager | Joe Bennett, Predator Management Staff Specialist, Nevada Department of Wildlife |
| Project Type | Implementation |
| Potentially Affected Species | Common raven, Greater sage-grouse |
| Span More Than One Fiscal Year | Yes |
| Project Area | Elko, Eureka, Humboldt, Lander, Lincoln, Lyon, Washoe, and White Pine counties. |
| Limiting Factor Statement | Though predation is a naturally occurring phenomenon for sage-grouse, their populations can be suppressed by abiotic factors such as dry climate and loss of or reduction in habitat quality. Increases in predator numbers can also cause decreases in sage-grouse populations; raven abundance has increased throughout their native ranges, with increases as much as 1,500% in some areas (Boarman 1993, Coates et al. 2007, 2014, Sauer et al. 2011, O'Neil et al. 2018). Under these circumstances, raven predation can have a negative influence on sage-grouse nesting success, recruitment, and population trend (Coates and Delehanty 2010). |
| Response Variable | Common raven point counts may be conducted before, during, and after removal to detect changes in common raven densities. |
| Project Goals | 1. Reduce raven populations in high abundance areas that overlap sensitive sage-grouse populations identified by NDOW and USDA Wildlife Services wildlife biologists with assistance from USGS raven abundance modeling and cost-benefit tools.<br>2. Increase populations of sage-grouse in specific areas where deemed feasible. |

| | |
|---|---|
| Habitat Conditions | Areas of raven removal will be within or in close proximity to sage-grouse leks, nesting habitat, and brood-rearing habitat. Persistent drought throughout Nevada has reduced herbaceous cover, along with nesting and brood rearing habitat; these effects are exacerbated by wildfire and the invasion of cheatgrass. Transmission lines, substations, and nearby agriculture production often attract ravens which may threaten nearby sage-grouse populations. |
| Comments from FY 2024Predator Report | Raven management, including lethal removal, is imperative to maintain and improve certain sage-grouse vital rates and the ecosystems they depend on. NDOW recommends continuing Project 21 while common ravens are believed to be a limiting factor for sage-grouse. |
| Methods | *Lethal Removal*<br>Chicken eggs treated with corvicide (DRC-1339) will be deployed to remove ravens (Coates et al. 2007). To reduce non-target species exposure, no eggs will be left in the environment for over 168 hours. No leftover eggs will be used on subsequent treatments. All remaining eggs and any dead common ravens found will be collected and disposed of properly as per DRC-1339 protocol. DRC-1339 is effective only on corvids and most mammals and other birds are not susceptible to the specific effects from this agent.<br><br>*Monitoring*<br>Point counts for ravens will be conducted from March through July of each year, which corresponds with sage-grouse nesting and brood-rearing season. Surveys will be similar to Ralph et al. (1995): lasting 10 minutes; conducted between sunrise and 1400 hrs; conducted under favorable weather conditions; and stratified randomly across study areas (Luginbuhl et al. 2001, Coates et al. 2014). |
| Anticipated Result | The removal of common ravens is intended to result in long-term protection for Greater Sage-grouse populations through increases in nest success, brood survival, and recruitment.<br><br>This project will continue until evidence demonstrating Greater sage-grouse nest success and recruitment are not limiting population growth due to common raven predation or common raven populations are in decline from non-lethal measures. The Department anticipates an increase in the USFWS raven depredation permit for this season. |
| Staff Comment | Project 21 will become progressively more precise with deliverables from Project 41. It is the Department's desire to ultimately use Project 21 to create temporary voids of ravens for sage-grouse during sensitive times and to reverse the raven population growth curve. |
| Project Direction | Fund Project 21. |

Proposed Budget

| $3 Predator Fee | Pittman-Robertson | Total |
|---|---|---|
| $145,000 | N/A | $145,000 |

Previous Budgets and Expenditures

| Year | Budget Proposed | Expenditures |
|---|---|---|
| 2008 | $12,000 | $12,000 |
| 2009 | $17,475 | $17,475 |
| 2010 | $15,000 | $14,298 |
| 2011 | $16,261 | $0 |
| 2012 | $16,261 | $9,842 |
| 2013 | $60,000 | $0 |
| 2014 | $60,000 | $0 |
| 2015 | $60,000 | $63,297 |
| 2016 | $128,000 | $72,710 |
| 2017 | $103,000 | $69,674 |
| 2018 | $125,000 | $55,846 |
| 2019 | $125,000 | $113,938 |
| 2020 | $200,000 | $25,518 |
| 2021 | $175,000 | $57,094 |
| 2022 | $175,000 | $36,517 |
| 2023 | $175,000 | $150,465 |
| 2024 | $175,000 | $221,216 |
| Average: | $96,353 | $54,111 |
| Total: | $1,637,997 | $991,890 |

Expenditures were combined with Project 21 and previously funded 21-02. Heritage expenditures were not included.

## Project 37: Big Game Protection-Mountain Lions

| | |
|---|---|
| Justification | Predation issues frequently arise in a very short timeframe. By the time a project can be drafted, approved, and implemented, it may be too late to prevent or mitigate the predation issue. Removing mountain lions that prey on sensitive game populations quickly is a required tool to manage big game populations statewide. |
| Project Manager | Joe Bennett, Predator Management Staff Specialist, Nevada Department of Wildlife |
| Project Type | Implementation |
| Potentially Affected Species | Mountain lion, mule deer, bighorn sheep, antelope |
| Span More Than One Fiscal Year | Yes |
| Project Area | Statewide |
| Limiting Factor Statement | Mountain lions are known predators of bighorn sheep, mule deer and other big game species (Rominger et al. 2004). Though predation is a naturally occurring phenomenon for bighorn sheep and other big game, their populations can be lowered or suppressed by abiotic factors such as dry climate and loss of quality habitat. Mitigating abiotic factors by removing predators is imperative for some bighorn sheep populations to stabilize (Rominger 2007). |
| Response Variable | Measuring response variables are not a primary objective of this project. Response variables may include reduction of prey taken by mountain lions, removal of a mountain lion that was documented consuming the concerned big game species, or a reduction in mountain lion sign. Because of the quick nature of the project, there may be times when no response variable will be measured. |
| Project Goal | Remove specific, problematic mountain lions to benefit game species. |
| Habitat Conditions | Persistent drought, frequency and size of wildfires, extremely high numbers of wild and feral equids and human developments throughout Nevada have reduced herbaceous cover, lambing, and browsing habitat. These effects have reduced mule deer and other big game populations below population potential (Ballard et al. 2001). |
| Comments from FY 2024 Predator Report | NDOW supports continuing Project 37 until local bighorn sheep populations become viable as defined in the annual Predator Report. NDOW supports the ability to remove mountain lions as deemed necessary with efficiency and expediency. |
| Methods | NDOW will specify locations of mountain lions that may be influencing local declines of sensitive game populations. Locations will be determined with GPS collar points, trail cameras, and discovered mountain lion kill sites. Removal |

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| | efforts will be implemented when indices levels are reached, these include low annual adult survival rates, poor fall young:female ratios, spring young:female ratios, and low adult female annual survival rates (table 3). Depending on the indices identified, standard to intermediate levels of monitoring will be implemented to determine the need for or effect of predator removal. These additional monitoring efforts may be conducted by NDOW employees, USDA Wildlife Services, or private contractors.<br><br>Staff and biologists will identify species of interest, species to be removed, measures and metrics, and metric thresholds. This information will be recorded on the Local Predator Removal Progress Form and included in the annual predator report.<br><br>Project 37 will be used to decrease mountain lion densities immediately before a bighorn sheep translocation and be used to keep mountain lion densities decreased after new translocations or augmentations. |
| Anticipated Results | 1. Lethal removal of individual, problematic mountain lions will provide a precise tool, protecting reintroduced and sensitive big game populations.<br><br>2. Implementation will occur in association with game populations that are sensitive (e.g., small in size, limited in distribution, in decline) and may benefit from rapid intervention from specific predation scenarios. |
| Staff Comment | Proactive mountain lion removal to assist struggling bighorn sheep populations is well documented within the scientific literature. |
| Project Direction | Fund Project 37. |

Table 3. Indices used to initiate predator removal.

| Species | Annual Adult Survival Rates | Fall Young: Female Ratios | Spring Young: Female Ratios | Adult Female Annual Survival Rates |
|---|---|---|---|---|
| California Bighorn Sheep | < 90% | < 40:100 | -- | -- |
| Rocky Mountain Bighorn Sheep | < 90% | < 40:100 | -- | -- |
| Desert Bighorn Sheep | < 90% | < 30:100 | -- | -- |
| Mule Deer | -- | -- | < 35:100 | < 80% |
| Pronghorn | < 90% | < 40:100 | -- | -- |

Budget

| $3 Predator Fee | Pittman-Robertson | Total |
|---|---|---|
| $150,000 | N/A | $150,000 |

Previous Budgets and Expenditures

| Year | Budget Proposed | Expenditures |
|---|---|---|
| 2016 | $90,000 | $26,670 |
| 2017 | $125,000 | $192,427 |
| 2018 | $175,000 | $175,217 |
| 2019 | $50,000 | $67,233 |
| 2020 | $75,000 | $71,465 |
| 2021 | $75,000 | $60,357 |
| 2022 | $100,000 | $52,764 |
| 2023 | $100,000 | $160,735 |
| 2024 | $150,000 | $211,842 |
| Average: | $104,444 | 107,327 |
| Total: | $940,000 | $965,946 |

## Project 38: Big Game Protection - Coyotes

| | |
|---|---|
| Justification | Predation issues frequently arise in a very short timeframe. These occurrences often occur within a fiscal year, therefore by the time a project can be drafted, approved, and implemented, to prevent or mitigate the predation issue, it may be too late. Removing problematic coyotes quickly is a required tool to manage big game populations statewide. |
| Project Manager | Joe Bennett, Predator Management Staff Specialist, Nevada Department of Wildlife |
| Project Type | Implementation |
| Potentially Affected Species | Coyote, mule deer, antelope, Greater Sage-grouse |
| Span More Than One Fiscal Year | Yes |
| Project Area | Statewide |
| Limiting Factor Statement | Though predation is a naturally occurring phenomenon for mule deer and other big game, their populations can be lowered or suppressed by abiotic factors such as dry climate and loss of quality habitat. Predation from coyotes may further suppress these populations (Ballard et al. 2001). |
| Response Variable | Response variables may include reduction of prey taken by coyotes, removal of a coyote that was documented consuming the concerned big game species, or a reduction in coyote sign. Because of the quick nature of the project, there may be times when no response variable will be measured. |
| Project Goal | Conduct focused coyote removal to protect game species. |
| Habitat Conditions | Persistent drought combined with fires and human disturbances throughout Nevada have reduced herbaceous cover, lambing, and browsing habitat. These effects may have reduced mule deer and other big game populations below population potential. These effects may also be suppressing mule deer or big game populations below population potential (Ballard et al. 2001). |
| Comments from FY 2024 Predator Report | NDOW supports continuing Project 38 pending available funding. |
| Methods | USDA Wildlife Services and private contractors, working under direction of NDOW, will use foothold traps, snares, fixed-wing aircraft and helicopters for aerial gunning, calling and gunning from the ground to remove coyotes in sensitive areas during certain times of the year. Work will be implemented when |

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| | indices levels are reached, these include low annual adult survival rates, poor fall young:female ratios, poor spring young:female ratios, and low adult female annual survival rates (table 3). Depending on the indices identified, standard to intermediate levels of monitoring will be implemented to determine the need for or effect of predator removal. These additional monitoring efforts may be conducted by NDOW employees, USDA Wildlife Services, or private contractors. |
| Anticipated Results | 1. Removal of coyotes in winter range and fawning and lambing areas in certain situations will provide a valuable tool for managers.<br>2. Implementation will occur during times and locations where sensitive game species are adversely affected (e.g., local decline, reduced recruitment) based on the best available biological information. |
| Staff Comment | Proactive coyote removal to assist struggling pronghorn populations is well documented within the scientific literature. |
| Project Direction | Fund Project 38. |

Table 3. Indices used to initiate predator removal.

| Species | Annual Adult Survival Rates | Fall Young: Female Ratios | Spring Young: Female Ratios | Adult Female Annual Survival Rates |
|---|---|---|---|---|
| California Bighorn Sheep | < 90% | < 40:100 | -- | -- |
| Rocky Mountain Bighorn Sheep | < 90% | < 40:100 | -- | -- |
| Desert Bighorn Sheep | < 90% | < 30:100 | -- | -- |
| Mule Deer | -- | -- | < 35:100 | < 80% |
| Pronghorn | < 90% | < 40:100 | -- | -- |

Budget

| $3 Predator Fee | Pittman-Robertson | Total |
|---|---|---|
| $105,000 | N/A | $10,000 |

Previous Budgets and Expenditures

| Year | Budget Proposed | Expenditures |
|---|---|---|
| 2016 | $90,000 | $97,794 |
| 2017 | $125,000 | $135,507 |
| 2018 | $175,000 | $133,720 |
| 2019 | $50,000 | $50,569 |
| 2020 | $75,000 | $73,480 |
| 2021 | $75,000 | $60,905 |
| 2022 | $100,000 | $1,270 |
| 2023 | $100,000 | $150,757 |
| 2024 | $100,000 | $93,200 |
| Average: | $98,889 | $88,578 |
| Total: | $890,000 | $797,202 |

## Project 40: Coyote and Mountain Lion Removal to Complement Multi-faceted Management

| | |
|---|---|
| Justification | The Department is proposing an intensive 4–5year coyote control project in Management Area 13 to assist with fawn recruitment which has been below the threshold of 35 fawns per adults during the spring for an extended period. The MA13 deer herd has underperformed due to drought and increasing feral horse numbers within the Mokemoke Hills area in Hunt Unit 131. |
| Project Manager | Joe Bennett, Predator Management Staff Specialist, Nevada Department of Wildlife |
| Project Type | Implementation |
| Potentially Affected Species | Coyote, Greater Sage-grouse, mule deer, mountain lion |
| Span More Than One Fiscal Year | Yes |
| Project Area | MA 13 |
| Limiting Factor Statement | Though predation is a naturally occurring phenomenon for mule deer and other big game, their populations can be reduced or suppressed by abiotic factors such as dry climate and loss of quality habitat, these populations can be suppressed by predation from coyotes (Ballard et al. 2001). |
| Response Variable | The response variable will be the fawn to doe ratios in Hunt Unit 131. This ratio will be observed throughout the life of the project. The project will be altered or discontinued after three consecutive years of observed spring fawn:adult ratios averaging 50:100 or higher. |
| Project Goal | To increase mule deer and Greater Sage-grouse populations by removing coyotes and mountain lions. |
| Habitat Conditions | Persistent drought combined with fires and human disturbances throughout Nevada have reduced herbaceous cover, fawning, and browsing habitat. These effects may have reduced mule deer below population potential. These effects may also be suppressing mule deer below population potential (Ballard et al. 2001). |
| Comments from FY 2024 Predator Report | NDOW supports continuing Project 40 until mule deer populations reach levels defined in the annual Predator Plan. |
| Methods | USDA Wildlife Services and private contractors working under direction of NDOW will use foothold traps, snares, fixed-wing aircraft and helicopters for aerial gunning, and calling and gunning from the ground to remove coyotes in sensitive areas during certain times of the year. |

| | |
|---|---|
| Anticipated Result | Coyote removal will complement some of the habitat improvement work conducted by the U.S. Forest Service and Nevada Department of Wildlife within the White Pine Range/Mokemoke Hills complex which includes pinyon and juniper removal work and spring improvement/protection projects. |
| Staff Comment | The Department supports multi-faceted management projects such as Project 40. |
| Project Direction | Fund Project 40. Evaluate efficacy of Project 40 annually. |

Additional Information

After approximately 10 years of treatment, the Department believes that it is time to focus intensive coyote control efforts to other areas of need. Spring fawn ratios in Management Area 14 have averaged 31 fawns per 100 adults over a 3-year period from 2022 through 2024. In comparison, spring fawn ratios in adjacent Management Area 15 have averaged 40 fawns per 100 adults without intensive control targeting coyotes. Meanwhile, spring fawn ratios in Management Area 13 have, like Management Area 14, averaged 31 fawns per 100 adults during that same time frame. We recommend experimenting with intensive coyote control in portions of Management Area 13 to determine if this action can benefit fawn recruitment. Through project 38, the Department plans on implementing maintenance for Hunt Unit 144 in FY 26. If, in the future, it is deemed that intensive coyote removal is necessary in Hunt Unit 144 or within Management Area 14, that project can resume.

Budget

| **$3 Predator Fee** | **Pittman-Robertson** | **Total** |
|---|---|---|
| $80,000 | N/A | $80,000 |

Previous Budgets and Expenditures

| **Year** | **Budget Proposed** | **Expenditures** |
|---|---|---|
| 2016 | $60,000 | $36,402 |
| 2017 | $100,000 | $109,432 |
| 2018 | $100,000 | $110,960 |
| 2019 | $100,000 | $107,461 |
| 2020 | $100,000 | $83,213 |
| 2021 | $100,000 | $100,445 |
| 2022 | $100,000 | $97,251 |
| 2023 | $150,000 | $134,269 |
| 2024 | $100,000 | $76,973 |
| Average: | $101,111 | $95,156 |
| Total: | $910,000 | $856,406 |

Project 43: Meso-predator removal to protect waterfowl and upland gamebirds on Wildlife Management Areas

| | |
|---|---|
| Justification | Mesopredators including coyotes, striped skunks, and raccoons often consume waterfowl, quail, pheasant, and turkey eggs and broods. Consuming these eggs may limit fowl species population growth and could be causing declines of these populations at Mason Valley, Steptoe and Overton Wildlife Management Areas. |
| Project Manager | Isaac Metcalf, Adam Henriod and Bennie Vann, Nevada Department of Wildlife |
| Project Type | Implementation |
| Potentially Affected Species | Assorted waterfowl, turkey, pheasant, coyote, striped skunk, raccoon |
| Span More Than One Fiscal Year | Yes |
| Project Area | Mason Valley, Overton and Steptoe Wildlife Management Areas |
| Limiting Factor Statement | Though predation is a naturally occurring phenomenon for waterfowl and upland gamebirds, their populations can be lowed or suppressed by abiotic factors such as dry climate and loss of quality habitat. |
| Response Variable | The response variable for waterfowl, turkeys, quail species and pheasants will be the number of females with clutches, and the number of young per clutch. |
| Project Goals | To increase clutch size and survival of waterfowl and upland gamebirds (particularly turkey and quail species) on Mason Valley, Overton and Steptoe WMAs. |
| Habitat Conditions | Persistent drought throughout Nevada has reduced herbaceous cover, nesting, and browsing habitat. |
| Comments from FY 2024 Predator Report | NDOW recommends continuing project 43 pending funding availability. |
| Methods | USDA Wildlife Services and private contractors working under direction of NDOW, will use foothold traps, snares, calling and gunning from the ground to remove coyotes, striped skunks, and raccoons during waterfowl, turkey, quail and pheasant nesting seasons. |
| Anticipated Results | 1. Increase nest success of female turkeys, waterfowl, quail species and pheasants on Wildlife Management Areas.<br>2. Increase brood success of female turkeys, waterfowl, quail and pheasants that have clutches within or near Wildlife Management Areas. |

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| | This project will be cancelled or altered once there are two consecutive three-year averages where:<br>• The average hen turkey successfully raises 3 poults.<br>• Area biologists and management area supervisors believe that quail and pheasants no longer need predator removal. |
| Staff Comment | Area managers have noticed a substantial increase in waterfowl nest success and an increase in clutch size since the inception of project 43. |
| Project Direction | Fund Project 43. |

Budget

| **$3 Predator Fee** | **Pittman-Robertson** | **Total** |
|---|---|---|
| $40,000 | N/A | $40,000 |

Previous Budgets and Expenditures

| **Year** | **Budget Proposed** | **Expenditures** |
|---|---|---|
| 2017 | $50,000 | $42,246 |
| 2018 | $50,000 | $28,447 |
| 2019 | $50,000 | $38,038 |
| 2020 | $50,000 | $20,849 |
| 2021 | $50,000 | $17,350 |
| 2022 | $50,000 | $20,933 |
| 2023 | $50,000 | $22,282 |
| 2024 | $50,000 | $36,960 |
| Average: | $50,000 | $28,388 |
| Total: | $400,000 | $227,105 |

## Project 47: Mule Deer Enhancement Program Mule Deer Protection and Assessment

| | |
|---|---|
| Justification | Many of the projects proposed by MDEP subcommittees are for areas of low densities of mule deer or where populations have trended downward and/or have remained suppressed for extended periods of time. |
| Project Manager | Joe Bennett: Predator Staff Specialist, Nevada Department of Wildlife |
| Project Type | Implementation or Experimental Management |
| Potentially Affected Species | Mule deer, coyote, mountain lion |
| Span More Than One Fiscal Year | Yes |
| Project Area | Statewide |
| Limiting Factor Statement | Drought, fire, degraded habitat, and competition from feral horses may all be limiting factors. Predation and its interactions with these factors are the primary focus. |
| Response Variable | To Be Determined |
| Project Goals | 1. Increase mule deer population numbers or minimize loss to mule deer populations.<br>2. Increase understanding of predator removal on mule deer populations. |
| Habitat Conditions | Persistent drought combined with fires and human disturbances throughout Nevada have reduced herbaceous cover, fawning or lambing, and browsing habitat. These effects may have reduced mule deer and other big game populations below population potential. These effects may also be suppressing mule deer or big game populations below population potential (Ballard et al. 2001). |
| Comments from FY 2024 Predator Report | NA |
| Methods | Underperforming mule deer populations will be identified by local mule deer enhancement program committees. NDOW staff, along with the mule deer oversight committee, and other outside collaborators, will determine if predation |

| | |
|---|---|
| | is a likely limiting factor of mule deer populations. If predation is determined to be a likely limiting factor, one of two steps may be taken:<br>1. Address predation through projects 37, 38 or 47 for MDEP identified projects.<br>2. Working with an outside collaborator, conduct experimental management to address predation and create a model to inform the department when predator removal will and will not benefit mule deer populations. |
| Anticipated Results | 1. Healthier mule deer populations<br>2. A model to aid the Department in deciding when to and not to conduct predator control for the benefit of mule deer.<br>3. Contribute to mule deer biology knowledge through written documents, oral presentations, and public outreach |
| Staff Comment | NA |
| Project Direction | Fund Project 47 |

Budget

| **$3 Predator Fee** | **Pittman-Robertson** | **Total** |
|---|---|---|
| $80,000 | $ TBD | $80,000 |

Previous Budgets and Expenditures

N/A

## Proposed Predator Management Budget for State Fiscal Year 2026

| Project | Predator Fee | PR Funds | Total |
|---|---|---|---|
| Department of Agriculture Administrative Support Transfer[a] | $14,000 | N/A | $14,000 |
| Project 21: Greater Sage-Grouse Protection (Common Raven Removal) | $145,000 | N/A | $175,000 |
| Project 37: Big Game Protection-Mountain Lions | $150,000 | N/A | $150,000 |
| Project 38: Big Game Protection-Coyotes | $105,000 | N/A | $75,000 |
| Project 40: Coyote and Mountain Lion Removal to Complement Multi-faceted Management in White Pine County | $80,000 | N/A | $80,000 |
| Project 43: Meso-predator Removal to Protect Waterfowl, Turkeys, and Pheasants on Wildlife Management Areas | $40,000 | N/A | $40,000 |
| Project 47: Mule Deer Enhancement Program Mule Deer Protection and Assessment | $80,000 | NA | $80,000 |
| **Total[b]** | **$614,000** | **$0** | **$614,000** |

[a] This transfer of $3 game tag application fees for administrative support to the Department of Agriculture partially funds state personnel that conduct work for the benefit of wildlife at the direction of USDA Wildlife Services (e.g., mountain lion removal to benefit wildlife).
[b] The projects that contain lethal removal as a primary aspect, making them ineligible for Federal Aid funding.

## Expected Revenues and Beginning Balance of $3 Game Tag Application Fee for Lethal Removal

| | FY 2022 Actual | FY 2023 Actual | FY 2024 Actual | FY 2025 Projected | FY 2026 Estimated |
|---|---|---|---|---|---|
| Beginning balance | $622,969 | $930,654 | $768,922 | $326,650 | $392,291 |
| Revenues | $911,013 | $944,410 | $722,141 | $722,141 | $722,141 |
| Plan Budget | $886,500 | $1,159,000 | $1,059,000 | $1,254,000 | $614,000 |
| Expenditures | $603,328 | $1,106,142 | $1,164,413 | $656,500 | $614,000 |
| Ending balance | $930,654 | $768,922 | $326,650 | $392,291 | $500,432 |

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