

Mule Deer Enhancement Program Outline - DRAFT

This effort will be a part of the Sagebrush Conservation Initiative but will focus on addressing limiting factors affecting mule deer. Many of the challenges facing mule deer are caused by degraded habitat, or reduced habitat connectivity and projects designed to address those challenges will be a large focus of this effort. There are other limiting factors that mule deer face as well, such as predators. Typically, predators have a larger effect in degraded habitats and when animal body conditions are poor. It is critical to understand the relationship multiple limiting factors have on mule deer populations through investigation of animal body conditions and survival and recruitment of fawns through radio collaring animals, surveys, camera studies or other methods. Predator removal projects may be a result of these efforts.

Action 1: Create Mule Deer Teams based on NDOW Game Biologists and their respective Hunt Unit Groups.

- Teams may include Area Game and Habitat biologists, CAB members, Land Managing Agency biologists, key members of NGO's, sportsmen.

Action 2: Mule Deer Teams rank limiting factors for each Hunt Unit or Hunt Unit Group using a scale of 1-5 with 5 being the most critical limiting factor, 1 being less critical, and 0 being a non-issue.

- Each Mule Deer Team member will rate the limiting factors that they believe are the most critical. Averaging the Team member ratings of limiting factors in each matrix will produce a one-page document depicting collectively what Team members perceive are the major threats to mule deer in each Hunt Unit Group.

Action 3: Mule Deer Teams will complete Needs Assessment for each Hunt Unit or Hunt Unit Group based on highest rated Limiting Factors from the Limiting Factor Ranking Sheet.

- Once each Mule Deer Team has rated the limiting factors to mule deer in each area, they will complete the Needs Assessment to determine what the appropriate response should be to address the highest rated threats.

Action 4: Create Mule Deer Enhancement Program Committee which will be responsible approve what projects would be the most beneficial and highest priority for each Mule Deer Team.

- Supervising Game and Habitat Biologists, Wildlife Commissioners, Game and Habitat Staff Biologists, Land Managing Agency personnel, NGO personnel, Land Managing Agency personnel, Wildlife Services, etc.

Action 5: Mule Deer Teams will develop and prioritize project proposals to address limiting factors in their respective areas.

- Priority project lists will be submitted to the Mule Deer Enhancement Program Committee.

Action 6: Mule Deer Enhancement Program Committee will prioritize project proposals submitted by Mule Deer Teams.

- Approved priority projects will be submitted by Mule Deer Teams to appropriate agencies (BLM, USFS, USFWS, NDOW, Wildlife Commission, etc.) for NEPA analysis and approval, NDOW approval, Wildlife Commission approval, etc.
- This action will include coordination with partners, working through NEPA compliance process, finding funding sources, prioritizing projects with benefits to multiple species, expanding existing projects, prioritizing predator removal projects, etc.

Action 7: Implementation of projects

- Funding sources: Heritage Fund, Federal grants, Non-Governmental Organizations, Agency partners, etc.
- Labor sources: NDOW personnel, volunteers, contractors, agency work crews, etc.

Action 8: Monitoring progress

- Tracking completion of projects, consider creating a newsletter, mule deer surveys, habitat tours, communication with participants, etc.

Mule Deer Limiting Factor Ranking Sheet - DRAFT

County:		Mule Deer Unit Group					
Potential Limiting Factor	Rate (1 - 5)	A	B	C	D	E	F
Wildland Fire							
Invasive or Noxious Weeds							
Pinyon-Juniper Invasion							
Shrub senescence							
Improper grazing - Wild horses							
Improper grazing - Livestock							
Climate/Weather							
Limited Water Distribution							
Inadequate Migration Corridor							
Human Impacts – Direct							
- Collisions with vehicles							
- Shed antler hunting							
- Off-road racing							
- Other:							
<i>Human Impacts - Direct - Mean</i>							
Human Impacts –Indirect							
- Fences							
- Powerlines							
- Development							
- Other:							
<i>Human Impacts - Indirect - Mean</i>							
Mining							
Predation							
Disease							
Human-caused mortality (hunting & poaching)							
Conflicts with Laws/Policies/Regulations**							

**NEPA, Wilderness, ESA, Wild Horse and Burro Act, BLM Fire Plan/Policy, lawsuits, NDOW policies, etc.

Mule Deer Needs Assessment - DRAFT

5 = Highest Priority

1 = Lowest Priority

Potential Limiting Factors	Management Action	Strategy	Mule Deer Unit Group					
			Unit Group A	Unit Group B	Unit Group C	Unit Group D	Unit Group E	Unit Group F
Wildfire and Invasives	Planting	Native Seed						
		Shrub Plantings						
		Strategic Non-Native Seeding						
	Herbicide	Chemical Fallow						
		Targeted Application						
		Biological Control						
	Fuels Management	Grazing Management						
		Mechanical Thinning/Removal						
		Green Strip						
		Chemical Fallow						
		Mechanical Removal						
		Fencing						
		Prescribed Fire						
Conifer Invasion	Removal	Mechanical - Masticator						
		Mechanical - chaining						
		Hand Thinning						
		Lop and Scatter						
		Pile and Burn						
		Prescribed Fire						
	Restoration - Protection	Overseeding						
		Fencing						
		Grazing Management						
		Herbicide - Spot Treatment						
Lack of Diversity	Habitat Improvement	Mechanical Removal/Thinning						
		Overseeding						
		Shrub Plantings						
		Fencing						
		Grazing Management						
		Easement / Acquisition						
		Water Development						
		Spring Protection						

Potential Limiting Factors	Management Action	Strategy	Mule Deer Unit Group					
			Unit Group A	Unit Group B	Unit Group C	Unit Group D	Unit Group E	Unit Group F
Lack of Connectivity	Protection	Easement / Acquisition						
		Transportation Passage						
		Migration Corridor						
		Fence Modificaitons						
		Land Use Planning						
		Dept. of Transportation Action						
		- Wildlife Crossing						
		- Add road signs						
		Private Lands Action						
Predation	Project	Coyote Removal						
		Mountain Lion Removal						
		Trail Camera Grid						
		Predator Research						
		Deer Collaring Study						
Wildlife Health & Disease	Prescription	Disease Testing						
		Age Structure Study						
		Limit Harrassment						
		Adjust Tag Numbers						
Data Gaps	Big Game	Big Game Collaring						
		Trapping & Transplant						
		Modify Survey & Inventory						
		Increased Law Enforcement						
		Add / Remove Late Hunt						