

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 11
(Nine Mile)
March 2012

BOUNDARY DESCRIPTION

Carbon, Duchesne, Emery and Uintah Counties—Boundary begins at US-40 and US-191 in Duchesne; southwest on US-191 to US-6; southeast on US-6 to I-70; east on I-70 to Exit 164 and SR-19 near the town of Green River; north and west on SR-19 to Hastings Road; north on this road to the Swasey boat ramp and the Green River; north along this river to the Duchesne River; west along this river to US-40 at Myton; west on US-40 to US-191 in Duchesne.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP

	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Ownership						
Forest Service	7240	1%	35036	10%	57349	11%
Bureau of Land Management	315657	59%	111058	31%	296492	57%
Utah State Institutional Trust Lands	38845	7%	28819	8%	38596	8%
Native American Trust Lands	48508	9%	0	0%	48686	9%
Private	116726	22%	178895	51%	70679	14%
Department of Defense	0	0%	0	0%	0	0%
USFWS Refuge	0	0%	0	0%	0	0%
National Parks	0	0%	0	0%	0	0%
Utah State Parks	0	0%	0	0%	0	0%
Utah Division of Wildlife Resources	4890	1%	0	0%	6906	1%
TOTAL	531866	100%	353808	100%	518708	100%

UNIT MANAGEMENT GOALS

³⁵₁₇ Expand and improve mule deer populations within the carrying capacity of available habitats and in consideration of other land uses.

³⁵₁₇ Provide a diversity of hunting and viewing opportunities for mule deer throughout the unit.

³⁵₁₇ Conserve and improve mule deer habitat throughout the unit with emphasis on crucial ranges.

POPULATION MANAGEMENT OBJECTIVES

Long Term Objective –

Manage for a winter population of 8,500 deer, distributed across the Range Creek and Anthro subunits

Anthro subpopulation: 2,500
Range Creek subpopulation: 6,000

Herd Composition –

All Nine Mile subunits are General Season subunits and will be managed for a 3-year average postseason buck to doe ratio in accordance with the statewide plan.

POPULATION MANAGEMENT STRATEGIES

Monitoring

³⁵₁₇ Population Size - Winter population size will be estimated using a computer model that was developed to utilize harvest data, postseason and spring classifications and radio collar based survival estimates.

³⁵₁₇ Buck Age Structure - Monitor age class structure of the buck population through the use of checking stations, postseason classification, uniform harvest surveys and field bag checks.

³⁵₁₇ Harvest - The primary means of monitoring harvest will be through the statewide uniform harvest survey and the use of checking stations. Achieve the target population size by use of antlerless harvest using a variety of harvest methods and seasons. Recognize that buck harvest will be above or below what is expected due to climatic and productivity variables. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives for buck: doe ratios

Limiting Factors (May prevent achieving management objectives)

³⁵₁₇ Crop Depredation - Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.

³⁵₁₇ Habitat - Public land winter range availability, landowner acceptance and winter range forage conditions will determine herd size. Excessive habitat utilization will be addressed with hunting.

³⁵₁₇ Predation - Follow DWR predator management policy:

- If the population estimate is less than 90% of objective and fawn to doe ratio drops below 70 for 2 of the last 3 years or if the fawn survival rate drops below 50% for one year, then a Predator Management Plan targeting coyotes will be implemented on that subunit.
- If the population estimate is less than 90% of objective and the doe survival rate drops below 85% for 2 of the last 3 years or below 80% for one year, then a Predator Management Plan targeting cougar would be implemented on that subunit.

³⁵₁₇ Highway Mortality - Work with UDOT, Counties, Universities, local conservation groups, and landowners to minimize highway mortality by identifying locations of high deer-vehicle collisions and erecting sufficient wildlife crossing structures in those locations. Evaluate the effectiveness of the crossing structures over time and implement new technologies to improve future wildlife crossing structures.

³⁵₁₇ Illegal Harvest - Support law enforcement efforts to educate the public concerning poaching and reduce illegal taking of deer.

HABITAT MANAGEMENT OBJECTIVES

³⁵₁₇ Maintain mule deer habitat throughout the unit by protecting and enhancing existing crucial habitats and mitigating for losses due to natural and human impacts.

³⁵₁₇ Improve the quality and quantity of vegetation for mule deer on crucial range.

³⁵₁₇ Provide improved habitat security and escapement opportunities for deer.

HABITAT MANAGEMENT STRATEGIES

³⁵₁₇ Continue to monitor permanent Big Game Range Trend Studies of crucial mule deer range across the unit.

³⁵₁₇ Continue annual seasonal range rides and range assessments to evaluate forage condition and utilization.

³⁵₁₇ Work with land management agencies, conservation organizations, private landowners, and local leaders through the regional Watershed Restoration Initiative working groups to identify and prioritize mule deer habitats that are in need of enhancement or restoration.

³⁵₁₇ Initiate broad scale vegetative treatment projects to improve mule deer habitat with emphasis on drought or fire damaged sagebrush winter ranges, ranges that are being taken over by invasive annual grass species, and ranges being diminished by encroachment of conifers into sagebrush or aspen habitats.

³⁵₁₇ Properly manage elk populations to minimize competition with mule deer on crucial ranges.

³⁵₁₇ Work with state and federal land management agencies to properly manage livestock to enhance crucial mule deer ranges

³⁵₁₇ Minimize impacts and mitigate for losses of crucial habitat due to human impacts and energy development.

³⁵₁₇ Work with county, state, and federal agencies to limit the negative effects of roads by

reclaiming unused roads, properly planning new roads, and installing fencing and highway passage structures where roads disrupt normal mule deer migration patterns.

PERMANENT RANGE TREND SUMMARIES

Unit 11a. Nine Mile. Anthro Subunit

The following table summarizes the condition of deer winter range on Unit 11a, as indicated by DWR permanent Big Game Range Trend studies:

Year	Mean DCI score for Subunit	Classification	Unit-specific DCI score range: Poor	Unit-specific DCI score range: Fair	Unit-specific DCI score range: Good
1995	62	Good	10 – 24	25 – 44	45 - 64
2000	47	Good			
2005	65	Excellent			
2010	69	Excellent			

There are four range trend sites on the Anthro portion of the Nine Mile Management Unit. Two of these are on summer range areas and two on winter range sites to the north. The studies were revisited in 2010 but only data for the two winter range sites has been summarized and made available for DCI index comparisons.

Pinyon and junipers stands dominate much of the area but contain sufficient natural openings to provide good quality winter range. There is potential to provide more forage during the fall-spring period with treatment of pinyon-juniper sites. The limited, xeric summer range remains an important limiting factor for deer populations on this subunit.

The two winter range study sites are located in Cottonwood Canyon and Nutters Canyon and are in low potential vegetative types. Both locations showed improvement from the 2005 indices when they were visited in 2010. The Cottonwood Canyon site produced a 69 index in 2010 and the Nutters Canyon site rated a score of 68. These ratings both provide an excellent DCI index. The combined winter range average DCI rating was 69 for the Anthro subunit. This figure indicates that deer winter range is in the excellent condition range

Unit 11b. Nine Mile. Range Creek Subunit

The following tables summarize the condition of deer winter range on Unit 11b, as indicated by DWR permanent Big Game Range Trend studies:

DCI Scores for Mid-Level Potential Winter Ranges on the Nine Mile Range Creek Subunit 1994-2010 (n=4).

Year	Mean DCI score for Subunit	Classification
1994	55.5	Fair
2000	59.6	Fair
2005	62.4	Fair
2010	65.2	Fair-Good

DCI Scores for Low Potential Winter Ranges on the Nine Mile Range Creek Subunit 1994 - 2010 (n=7).

Year	Mean DCI score for Subunit	Classification
1994	33.3	Fair
2000	38.3	Fair
2005	36.3	Fair
2010	40.8	Fair

There were 11 permanent winter range trend sites on the Range Creek subunit of the Nine Mile unit that were read in 2010. Of these sites, 7 are low elevation winter range areas predominated by deer. The remaining 4 winter range sites are on the eastern slopes of the Tavaputs plateau draining in to the Green River and are utilized by both deer and elk, although elk use is more prevalent. These sites were last surveyed in 2010.

The overall trend in relative winter range health as noted by the DCI has been slightly improving over the past 16 years. Trends for the lower elevation deer winter range sites tend to have a declining forb community while grass and browse communities are stable and improving in the last several years. Most range trend sites show improving browse production and vigor with relatively little deer use, while several high use sites show declining browse production. Upper elevation winter range sites showed relatively stable to improving browse condition yet declining herbaceous understory trends.

High quality summer range is limiting on the subunit. A relatively small percentage of the unit occurs at high enough elevations to provide good summer range for deer.

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.