

**MONTANA FISH, WILDLIFE & PARKS
HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION**

Species: Mule Deer
Region: 5
Hunting District: 510
Year: 2019

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

CWD was detected in this hunting district during the 2017 hunting season. Long term CWD management, as described in the Montana CWD Management Plan, is aimed at maintaining low densities of deer and low buck/doe ratios in hunting districts where CWD has been detected. The following season proposal is designed to meet these two broad objectives for HD 510.

This proposal eliminates the unlimited 510-50 buck mule deer permit and establishes an either sex mule deer season

Change From:

510: General License

Sep 07 – Oct 20 Either-sex White-tailed Deer. Archery Season Only

Oct 26 – Dec 1 Either=sex White-tailed Deer

Change To:

510: General License

Sep 07 – Oct 20 Either-sex Mule Deer. Archery Season Only

Either-sex White-tailed Deer. Archery Season Only

Oct 26 – Dec 01 Either=sex Mule Deer

Either-sex White-tailed Deer.

Table 1. Hunter and harvest statistics for mule deer B license holders for H.D. 510, 2007 – 2018.

Year	Season Type	B License Number	Harvest		B License Harvest
			Bucks	Antlerless	Antlerless
2007	Unl. Antlered Buck Permit	150	223	91	91
2008	Unl. Antlered Buck Permit	150	166	71	71
2009	Unl. Antlered Buck Permit	150	141	97	97
2010	Unl. Antlered Buck Permit	150	135	53	53
2011	Unl. Antlered Buck Permit	150	125	57	57
2012	Unl. Antlered Buck Permit	150	172	57	57
2013	Unl. Antlered Buck Permit	150	147	65	65
2014	Unl. Antlered Buck Permit	0	170	3	3
2015	Unl. Antlered Buck Permit	0	212	2	2
2016	Unl. Antlered Buck Permit	75	169	30	30
2017	Unl. Antlered Buck Permit	75	141	26	26
2018	Unl. Antlered Buck Permit	150	NA	NA	NA

2. Why is the proposed change necessary?

This season change proposal is in direct response to the detection of CWD in this hunting district in 2017 and follows the guidelines established in the **Montana CWD Management Plan**. During the fall of 2017 CWD testing in HD 510 revealed the prevalence in mule deer to be approximately 0.08 (95%CI: 0.04 – 0.16, n=83) overall, or 0.09 among females (95%CI: 0.03 – 0.22, n=35) and 0.08 among males (95%CI: 0.03 – 0.19, n=49). Implementation of this proposal is necessary to begin to address the CWD threat. This season proposal is designed reduce the number of older age bucks and to stabilize or slightly reduce the mule deer population especially in the area close to the CWD endemic area. Maintaining lower densities of mule deer is thought to be the best preventative measure to control the spread of CWD.

3. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective of the season change is to increase the harvest of mule deer in this HD. Both mule deer buck and doe harvest will increase by about 50%. The post season buck/doe ratio will likely decline to about 10 bucks/100 does.

4. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Mule deer harvest will be monitored through the statewide harvest questionnaire survey. Deer numbers and sex ratios on the Sykes Ridge trend area will be monitored through annual post season helicopter surveys.

5. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Currently the mule deer population on the Sykes Ridge trend area is 21% above the long term average with fawn/doe ratio going into winter was 13% above average (Table 2). Spring recruitment surveys are not conducted in this hunting district.

Table 2. Counts and classification of mule deer on the Sykes Ridge trend area, hunting district 510, 1984 to 2017.

Year	Bucks		Does	Total Adults	Fawns	Total	Fawns/ 100 Does	Fawns/ 100 Ad.	Increment	Bucks/ 100 Does
	Yrlg	2+								
1984	4	17	58	79	33	112	57	42	29	36
1985	6	4	52	62	24	86	46	39	28	19
1986	No Survey									
1987	2		77	79	46	125	60	58	37	3
1988	29	28	339	396	169	565	50	43	30	17
1989	21	33	306	360	131	491	43	36	27	18
1990	22	46	266	334	108	442	41	32	24	26
1991	No Survey									
1992	No Survey									
1993	10	11	240	261	73	334	31	28	22	9
1994	25		240	265	91	356	38	34	26	10
1995	3	5	37	45	26	71	70	58	37	22
1996	4	5	117	126	33	159	28	26	21	8
1997	1		45	46	24	70	53	52	34	2
1998	20	10	133	163	70	233	53	43	30	23
1999	No Survey									
2000	No Survey									
2001	12	11	96	119	55	174	57	48	33	24
2002	No Survey									
2003	3	9	132	144	52	196	39	36	27	8
2004	1	3	70	74	14	88	20	19	17	6
2005	5	10	95	110	30	140	32	27	21	16
2006	No Survey									
2007	12	11	91	114	32	146	35	28	22	25
2008	9	9	119	137	24	161	20	18	15	15
2009		3	62	65	9	74	14	14	12	5
2010	23	22	210	255	94	349	45	37	27	21
2011	5	28	159	192	81	273	51	42	30	21
2012	12	15	115	142	56	198	49	39	28	23
2013	30	24	227	281	105	386	46	37	27	24
2014	28	39	277	344	150	494	54	44	30	24
2015	24	18	157	199	67	266	43	34	25	27
2016	4	10	128	142	50	192	39	35	26	11
2017	16	15	173	204	84	288	49	41	29	18

6. How will this proposal influence this population status?

This proposal will stabilize the population or hopefully begin to reduce the population below objective in the near term, which is the desired result in the face of the CWD threat. Buck numbers will be reduced, which will be reflected in lower buck/doe ratios.

7. Provide information related to any weather/habitat factors that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

- 1) Utilization transect information: None
- 2) Snow condition survey information: Winter weather conditions were severe in 2017/18 which may have resulted in low fawn recruitment and higher than normal adult mortality.
- 3) Describe access problems related to change, etc.
This is primarily a public land HD with the majority of the land controlled by the Forest Service or the BLM. No access problems will develop due to this proposal.
- 4) Overwinter survival information (i.e. bad winter lost what % of population)
It is reasonable to expect that during the severe winter of 2017-18 overwinter fawn mortality was in excess of 60% and adult doe mortality could have been as high as 15%.

8. Provide information relative to impacts to resident hunters, nonresident hunters and public & private land use.

Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

- 1) List specific sports groups or landowners:
This specific proposal has not been discussed with landowners or public groups. The season proposal is consistent with the CWD Management Plan which was adopted following a public process.

- 2) Indicate if proposal was recommended by public - is it in response to a concern by sportspersons: The proposal is in response to the hunting season recommendations provided in the CWD management plan.

Submitted by: Shawn T. Stewart

Date: 10/15/2018

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification: