

2014 - JCR Evaluation Form

SPECIES: Moose

PERIOD: 6/1/2014 - 5/31/2015

HERD: MO415 - UINTA

HUNT AREAS: 27, 35, 44, 901-902

PREPARED BY: JEFF SHORT

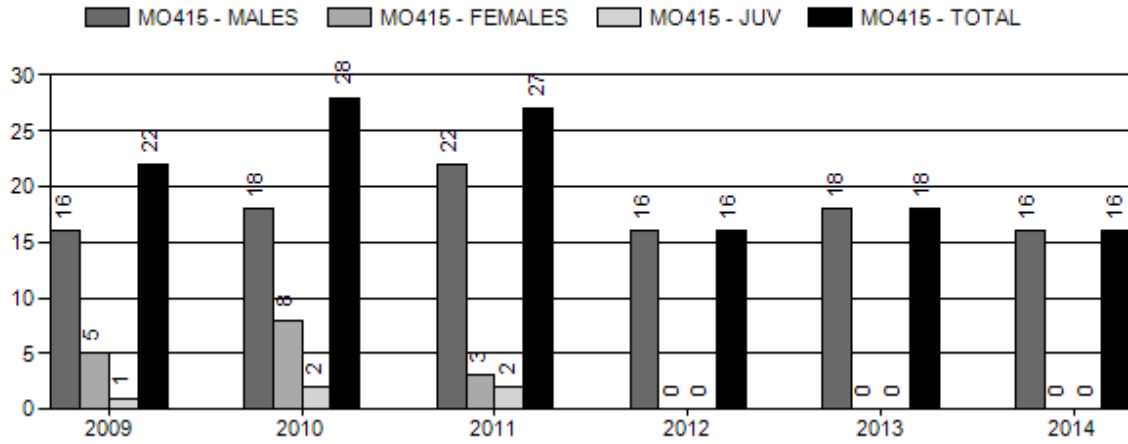
	<u>2009 - 2013 Average</u>	<u>2014</u>	<u>2015 Proposed</u>
Population:	NA	NA	NA
Harvest:	22	16	15
Hunters:	28	18	18
Hunter Success:	79%	89%	83%
Active Licenses:	28	18	18
Active License Success:	79%	89%	83%
Recreation Days:	256	146	150
Days Per Animal:	11.6	9.1	10
Males per 100 Females	44	75	
Juveniles per 100 Females	51	100	

Population Objective (Harvest Based):	NA
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	NA
Number of years population has been + or - objective in recent trend:	NA
Model Date:	None

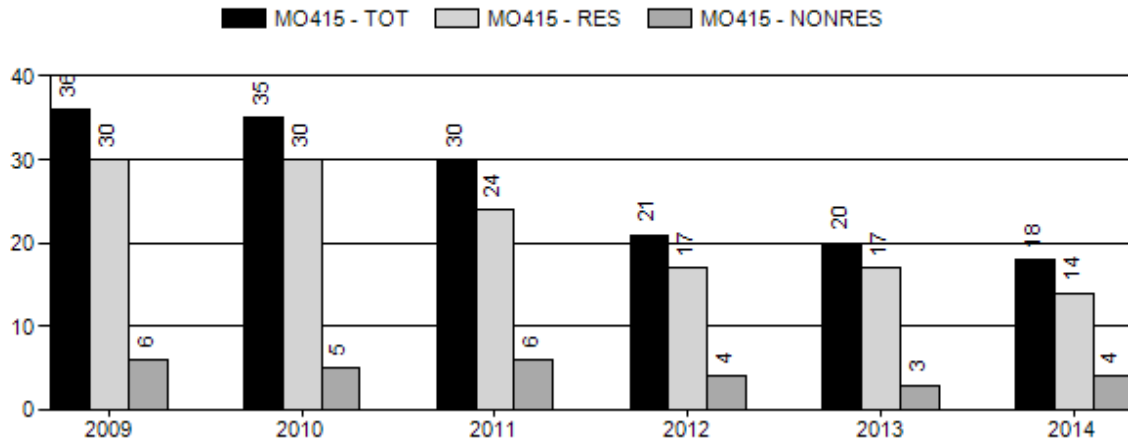
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	NA	NA
Males ≥ 1 year old:	NA	NA
Juveniles (< 1 year old):	NA	NA
Total:	NA	NA
Proposed change in post-season population:	NA	NA

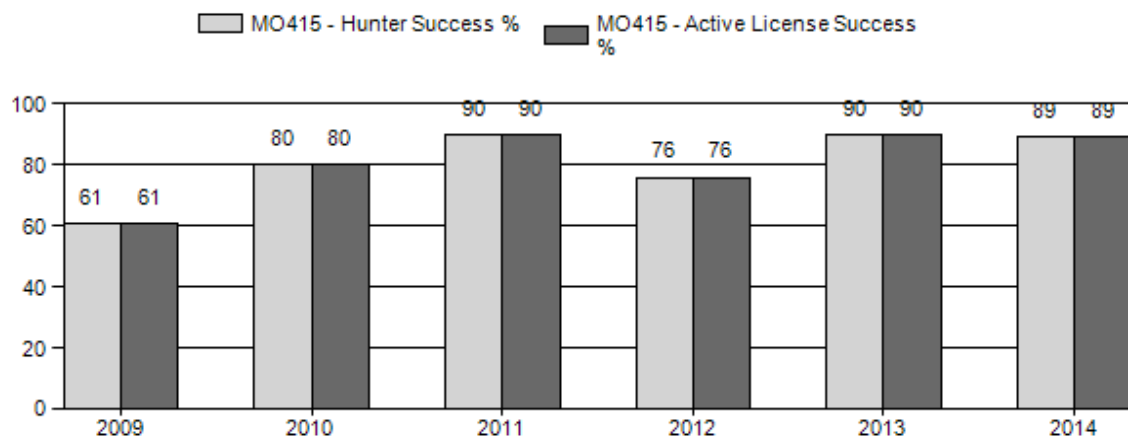
Harvest



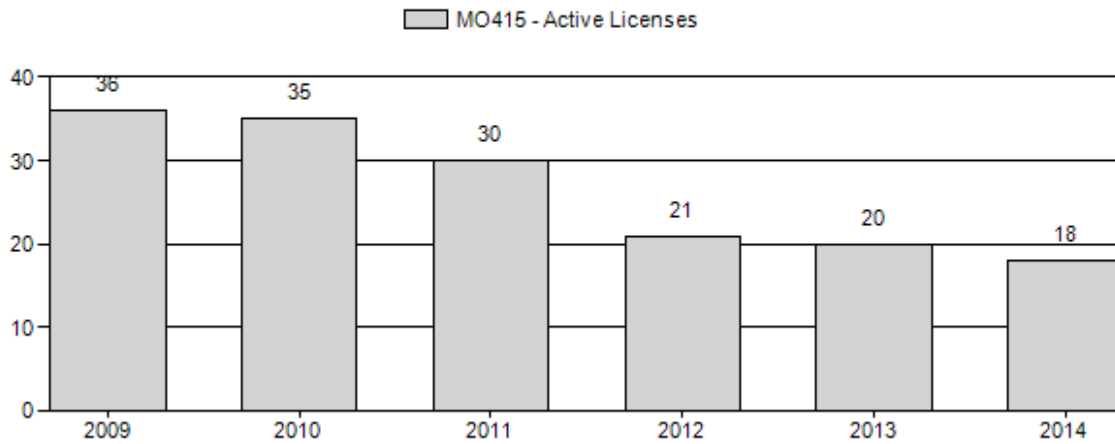
Number of Hunters



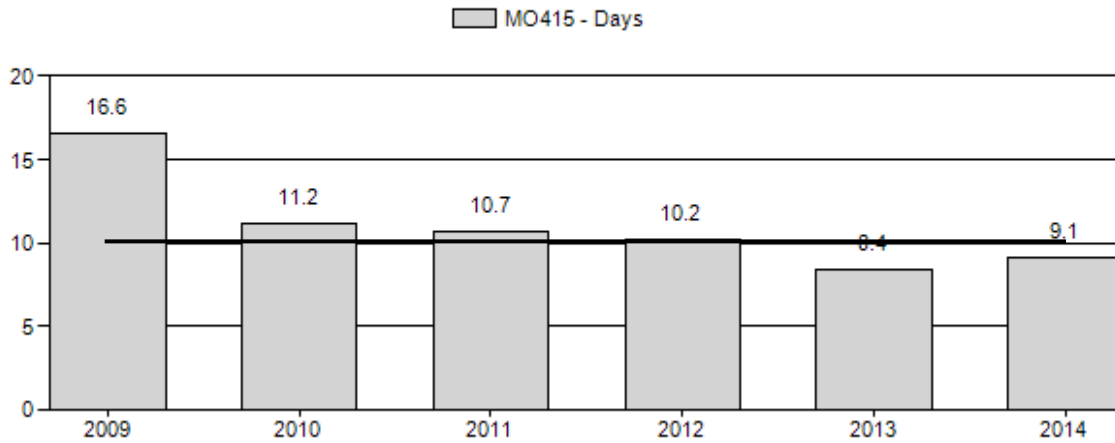
Harvest Success



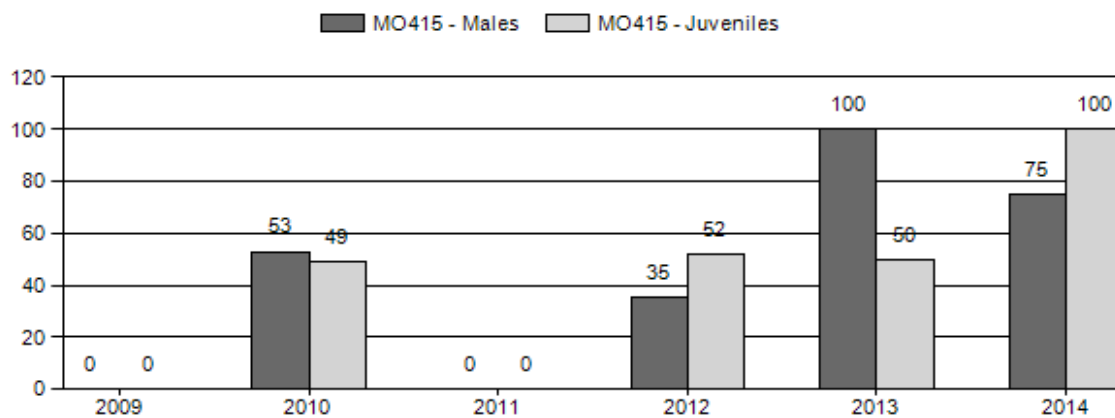
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2009 - 2014 Postseason Classification Summary

for Moose Herd MO415 - UINTA

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot CIs	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			Yng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2009	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	±0	0	±0	0
2010	0	0	0	62	26%	118	50%	58	24%	238	0	0	0	53	±0	49	±0	32
2011	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	±0	0	±0	0	
2012	0	0	52	52	19%	149	54%	77	28%	278	0	0	35	35	±0	52	±0	38
2013	0	0	8	8	40%	8	40%	4	20%	20	0	0	100	100	±0	50	±0	25
2014	0	1	2	3	27%	4	36%	4	36%	11	0	25	50	75	±0	100	±0	57

2015 HUNTING SEASON

SPECIES : **Moose**

HERD UNIT : **UINTA (415)**

HUNT AREAS: **27, 35, 44**

Hunt Area	Type	Dates of Seasons		Quota	Licenses	Limitations
		Opens	Closes			
27	1	Oct. 1	Nov. 20	15	Limited quota	Antlered moose
35	1	Oct. 1	Nov. 20	5	Limited quota	Antlered moose
44						CLOSED
27, 35	Archery	Sept. 1	Sept. 30			Refer to Section 3 of this chapter

Hunt Area	License Type	Quota change from 2014
Herd Unit Total		

Management Evaluation

Current Postseason Population Management Objective: Harvest Based

Management Strategy: Special

2013 Postseason Population Estimate: ~300

2014 Proposed Postseason Population Estimate: ~300

Herd Unit Issues

This is an interstate herd shared with Utah. Many moose that summer in the Uinta Mountains in Utah come to Wyoming to winter. Limited winter range is an issue for this herd. A significant portion of the lower elevation moose habitat is on private land so landowner tolerance of moose can be an issue. Moose coming into towns and residing in yards has been a reoccurring issue but far less common than in the past.

Our biggest concern is our lack of knowledge on disease issues in this herd. We have had several documented cases of elaeophorosis caused deaths in this herd and feel that this may have had a significant population effected on the herd. This has stabilized and elaeophorosis caused mortalities have reduced significantly in the last two years. However, we are continuing our conservative management strategy until we see moose numbers rebound significantly.

In 2006 Hunt Area 44 was added to the herd unit. There have been increasing numbers of moose in this area. This has created some concern to habitat managers since these moose are impacting the ability to bring back riparian shrubs in these xeric habitats. The objective has been to keep moose from establishing in this area. In 2012 Area 44 was added to the Area 35 hunt in the packet. In 2015 Area 44 will be closed to moose hunting due to concern over offering an opportunity with extremely low moose numbers. It will likely be reopened when moose numbers start to grow again.

Weather

Weather during 2014 and into 2015 was highly variable. In the early part of 2014 the winter was very mild and dry. A moist spring and summer followed. In late August and into September precipitation continued. The winter of 2014-2015 has been very mild to this point and moose have not migrated as far as normal to crucial winter ranges.. The winters of 2011/12, 2012/13 and 2013/14 were also mild with low snowpack resulting in mild winter conditions. However, the dry springs and summers of 2012 and 2013 negatively impacted summer and winter range forage production.

Habitat

Habitat data collection has been inconsistently collected in this herd unit and has been absent in the recent past.

Field Data

Since data is very limited in this herd it is difficult to look at data trends. It is not possible to model this interstate herd. Classification data is not collected consistently. We experienced a significant reduction in nuisance moose complaints and reduced field observations of moose in the period between 2007 and 2011. Between the 2007 and the 2011 survey our field observations indicated we had a sharp reduction in moose populations. We also received complaints from moose hunters about moose numbers. This prompted us to drastically reduce moose hunting opportunity during that period.

The moose flight data supported our concern about a reduction in moose numbers in the Uinta Herd Unit. The 2011 survey was conducted in ideal circumstances with high snow loads making moose highly visible and concentrated on specific wintering areas. The survey was also more intensely flown than previous surveys. This indicates that it was a good reference count and that we would have not missed large numbers of animals that may have been seen in previous surveys. The 2011 count represents the lowest total moose seen in Wyoming since the counts have been conducted. This information supported the deep cuts we made in moose harvest over the those years and we propose to stay conservative with harvest for 2015.

Moose surveys are flown in cooperation with Utah DNR, most recently in February 2013. Past results are shown below. Utah pays for a joint elk and moose survey on average every 3rd year. Classification data is collected during those surveys with Utah. In the off years some moose classification data is collected during aerial mule deer surveys in December. That data is reported in the JCR report graphs and tables but sample sizes are very inadequate and those ratios are not reliable.

TOTAL MOOSE COUNTED BY YEAR

	1996	1998	2001	2004	2007	2011	2013
UTAH DAGGETT (8B)	103	84	109	107	95	NA	74
UTAH SUMMIT (8A)	182	229	243	150	181	92	104
WYOMING	393	289	334	270	314	232	174
TOTAL WYOMING AND UTAH SUMMIT	575	518	577	420	495	324	278
TOTAL	678	602	686	527	590	324	352

Harvest Data

Antlerless harvest opportunity has been eliminated in this herd unit. We have drastically reduced the number of licenses in the last five years. Type 1 hunts have had very good success rates in the last four years. Tooth age data indicates at current hunting levels we are able to recruit a few older animals into the population and have them available to hunters.

Population

Due to interstate nature of this herd no working model exists. Weather severity is usually the determining factor in the number of moose that come into Wyoming from Utah during the winter. This and other factors make data collected inconsistent and unreliable.

Management Summary

For 2015 hunting seasons we will remain conservative with hunter harvest. Hunt area 44 will be closed for 2015 and no antlerless harvest will be allowed in the herd unit. This is an effort to allow maximum growth of the herd. However, hunting is not likely to be the limiting factor for this herd. The objective and management strategy were revised in 2014. During that objective review process we moved to a new objective type for this herd. Due to the issues associated with modeling and tracking this population we have switched to a harvest statistic based objective. This entails an age of harvest objective and an average days per harvest objective.

New objective criteria (Harvest Based)

- Minimum age of Harvest (median \geq 4 years)
- Days per Harvest (average \leq 10 days)

Secondary objective:

- 40% of male harvest \geq 5 years of age
- (5 year average timelines for better sample sizes)

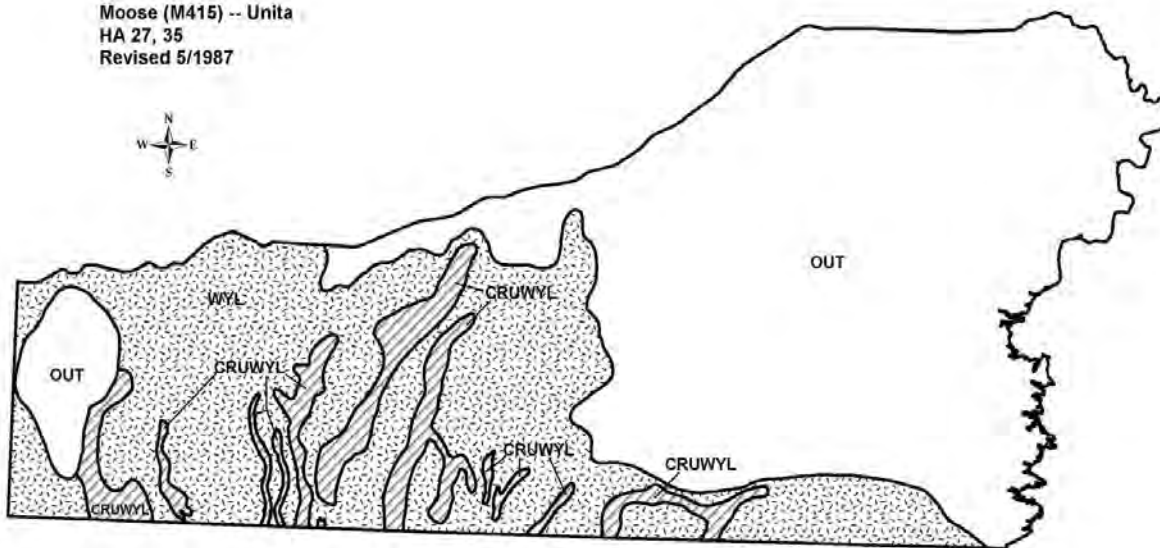
2009 - 2014 Harvest Summary

for Moose Herd MO415 - UINTA

Year	HUNTERS					HARVEST										SUCCESS			
	Res Htrs	NRes Htrs	% NRes	Total Htrs	Act Lic	Ylg Male	Adult Male	Total Male	% Male	Fem	% Fem	Juv	% Juv	Tot Harv	Hntrs	Act Lic	Hntr Days	Days to Harv	
2009	30	6	17%	36	36	0	16	16	73%	5	23%	1	5%	22	61%	61%	365	16.6	
2010	30	5	14%	35	35	0	18	18	64%	8	29%	2	7%	28	80%	80%	314	11.2	
2011	24	6	20%	30	30	0	22	22	81%	3	11%	2	7%	27	90%	90%	288	10.7	
2012	17	4	19%	21	21	0	16	16	100%	0	0%	0	0%	16	76%	76%	163	10.2	
2013	17	3	15%	20	20	0	18	18	100%	0	0%	0	0%	18	90%	90%	151	8.4	
2014	14	4	22%	18	18	0	16	16	100%	0	0%	0	0%	16	89%	89%	146	9.1	

2014 was the first year of this type of objective option. Currently, the JCR system is not set up to report this type of objective data. Starting next year we plan to have a better synopsis of this objective in this document.

Moose (M415) -- Unita
HA 27, 35
Revised 5/1987



2014 - JCR Evaluation Form

SPECIES: Moose

PERIOD: 6/1/2014 - 5/31/2015

HERD: MO417 - LINCOLN

HUNT AREAS: 26, 33, 36, 40

PREPARED BY: JEFF SHORT

	<u>2009 - 2013 Average</u>	<u>2014</u>	<u>2015 Proposed</u>
Population:	NA	NA	NA
Harvest:	45	54	53
Hunters:	47	55	55
Hunter Success:	96%	98%	96%
Active Licenses:	47	55	55
Active License Success:	96%	98%	96%
Recreation Days:	332	482	475
Days Per Animal:	7.4	8.9	9.0
Males per 100 Females	66	50	
Juveniles per 100 Females	37	69	

Population Objective ($\pm 20\%$) : 1620 (1296 - 1944)

Management Strategy: Special

Percent population is above (+) or below (-) objective: NA

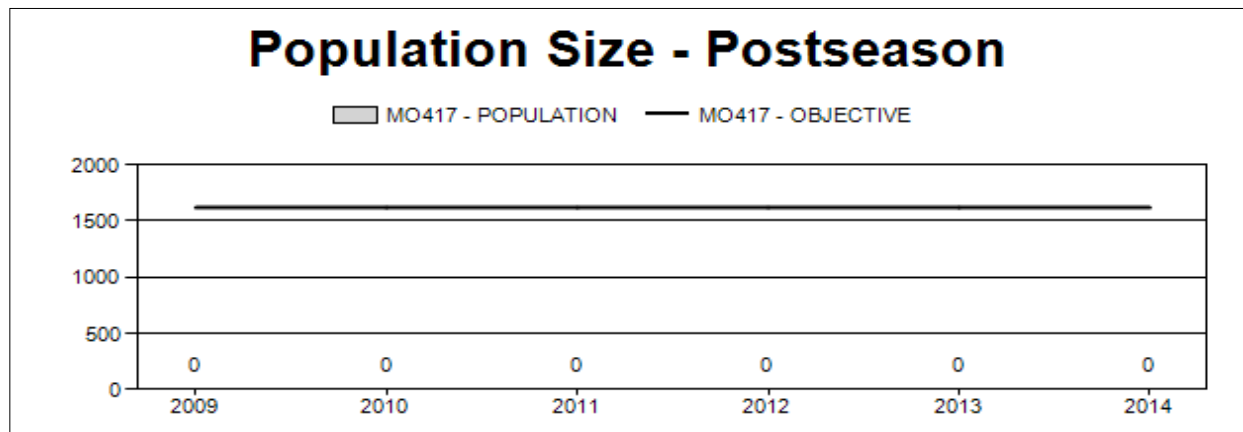
Number of years population has been + or - objective in recent trend: 7

Model Date: None

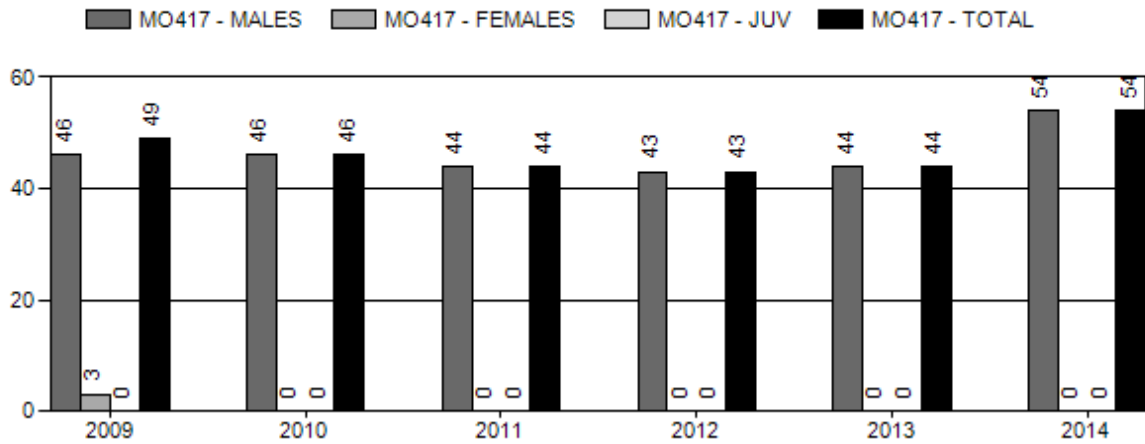
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	NA	NA
Males ≥ 1 year old:	NA	NA
Juveniles (< 1 year old):	NA	NA
Total:	NA	NA

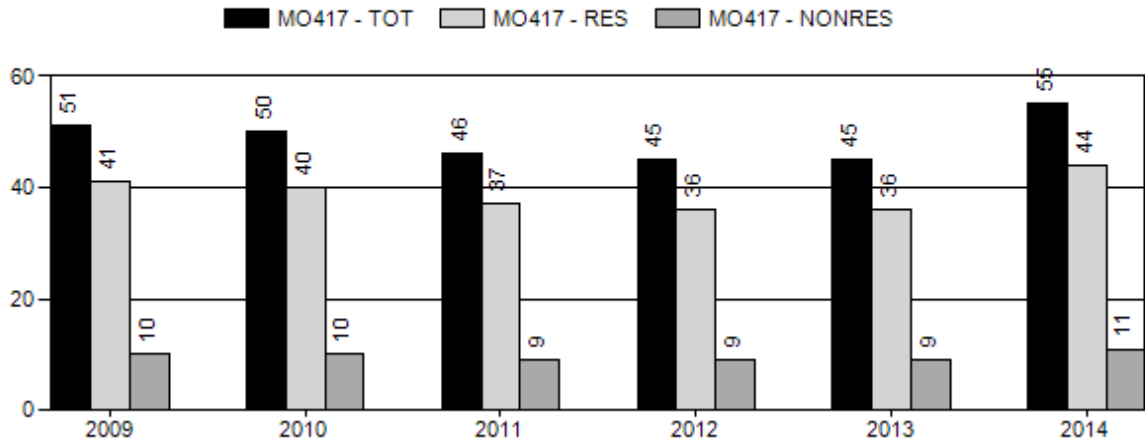
Proposed change in post-season population: NA



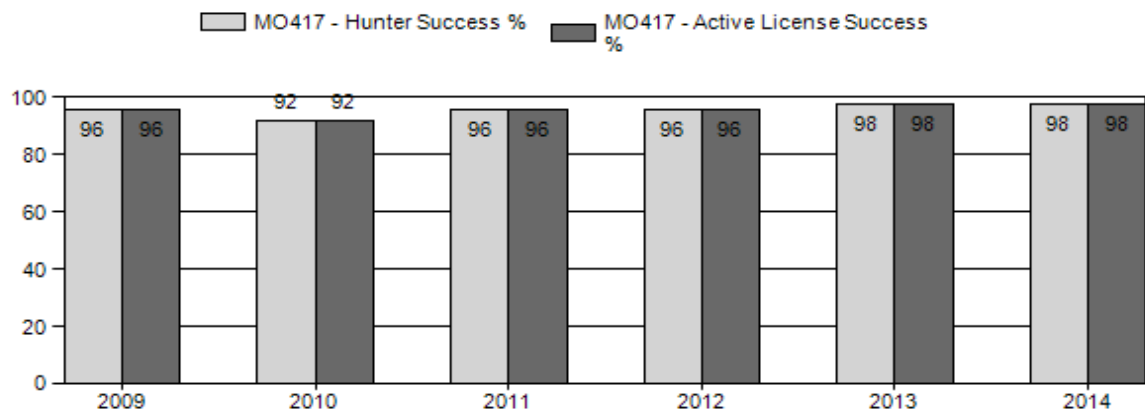
Harvest



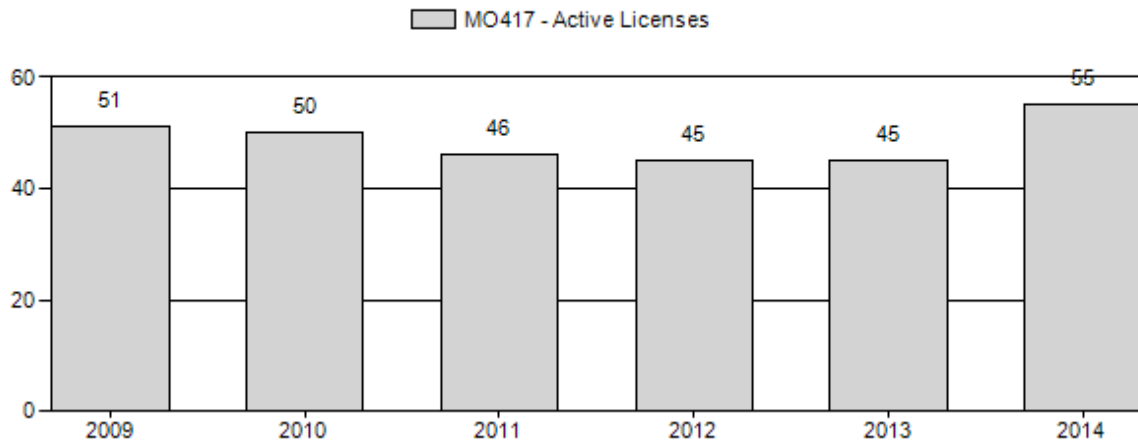
Number of Hunters



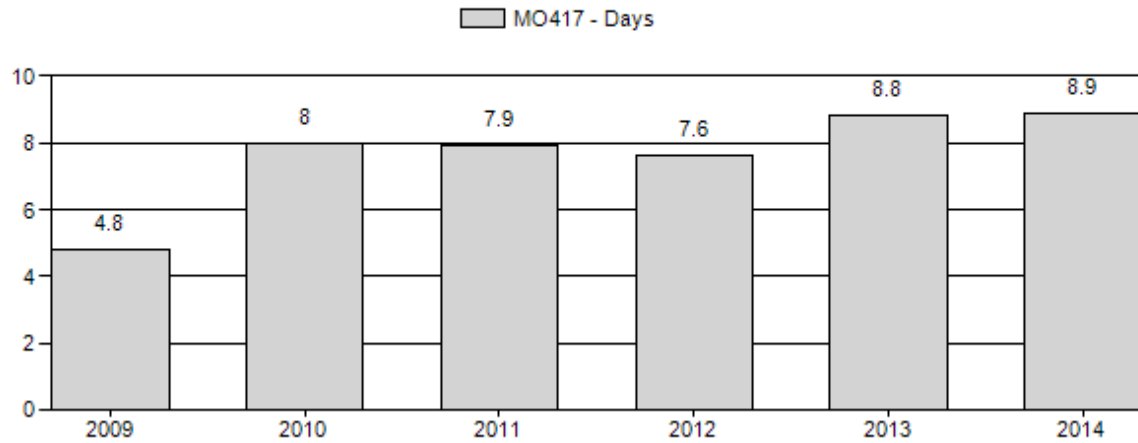
Harvest Success



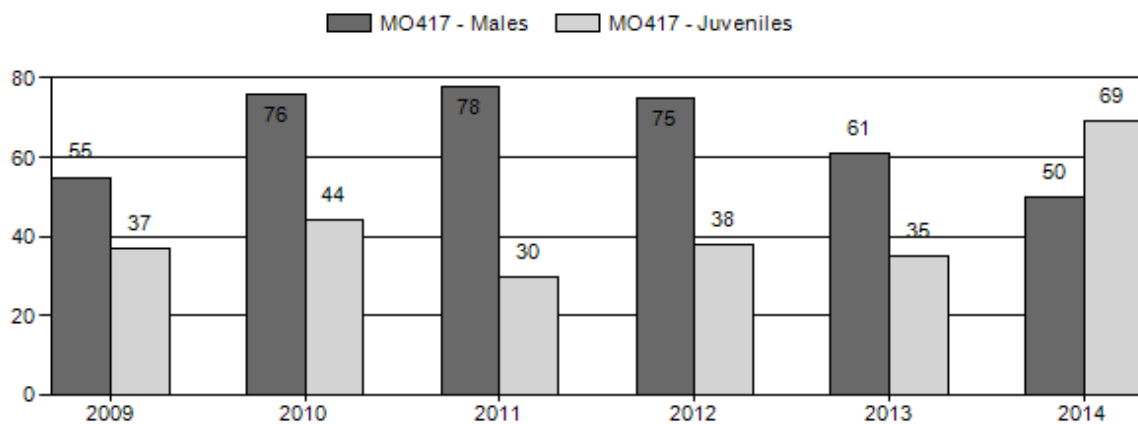
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2009 - 2014 Postseason Classification Summary

for Moose Herd MO417 - LINCOLN

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot CIs	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			YIng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2009	0	0	53	53	28%	97	52%	36	19%	186	0	0	55	55	± 9	37	± 7	24
2010	0	0	0	103	35%	135	45%	59	20%	297	0	0	0	76	± 0	44	± 0	25
2011	0	0	0	47	38%	60	48%	18	14%	125	0	0	0	78	± 17	30	± 9	17
2012	0	0	6	6	35%	8	47%	3	18%	17	0	0	75	75	± 0	38	± 0	21
2013	0	0	124	124	31%	202	51%	71	18%	397	0	0	61	61	± 0	35	± 0	22
2014	0	1	7	8	23%	16	46%	11	31%	35	0	6	44	50	± 0	69	± 0	46

2015 HUNTING SEASON

SPECIES : **Moose**

HERD UNIT : **LINCOLN (417)**

HUNT AREAS: **26, 33, 36, 40**

Hunt Area	Type	Dates of Seasons			Quota	Licenses	Limitations
		Opens	Closes				
26	1	Oct. 1	Oct. 31	50	Limited quota	Antlered moose	
33, 36, 40	1	Oct. 1	Oct. 31	5	Limited quota	Antlered moose in Areas 36 and 40, valid for antlerless moose only except cow moose with calf at side in Area 33	
26, 33, 36, 40	Archery	Sept. 1	Sept. 30			Refer to Section 3 of this chapter	

Hunt Area	License Type	Quota change from 2014
Herd Unit Total		

Management Evaluation

Current Postseason Population Management Objective: 1,620

Management Strategy: Special

2014 Postseason Population Estimate: ~600

2015 Proposed Postseason Population Estimate: ~600

Herd Unit Issues

A significant portion of the lower elevation moose habitat is on private land so landowner tolerance of moose can be an issue. Moose coming into towns and residing in yards has been an issue in the past. This herd unit is not a closed population with the northeast boundary line being through prime moose habitat.

The advent of parasite caused mortalities of unknown magnitude in the herd complicates management. There is a lack of knowledge on disease issues in this herd. We have had several documented cases of Elaeophorosis caused deaths in this herd and feel that this may have had a significant population effect. Elaeophorosis caused mortalities have reduced significantly in the last four years.

Hunt area 36, formerly the Bear River Divide moose herd, is now considered part of the Lincoln moose herd. This is a small moose herd that is scattered over a large expanse of non-typical open moose habitat. The herd unit objective was 120 moose. Harvest data will continue to be analyzed separately. This area acts as an “over flow” area for adjacent larger populations of moose in the Uinta and Lincoln herds. The young average age of animal harvested there supports our concept that younger age class animals are immigrating into this area. We do not survey this area for moose.

In hunt area 40 the moose population is almost entirely on private lands. Like Area 36, it has a small population of moose. Area 33 also has a very limited number of moose. They primarily occur on Seedskaadee National wildlife refuge and along the Green River. Area 33 had been closed for hunting from 2003 to 2013. It can be difficult for hunters to locate moose in areas 36 and 40. We have combined areas 33, 36 and 40 into one hunt with a total of 5 permits. This structure allows hunters to travel more to find moose. In 2015 Area 33 will only allow for hunting of cow moose without a calf at side.

Weather

Weather during 2014 and into 2015 was highly variable. In the early part of 2014 the winter was very mild and dry. A moist spring and summer followed. In late August and into September precipitation continued. The winter of 2014-2015 has been very mild to this point and moose have not migrated as far as normal to crucial winter ranges.. The winters of 2011/12, 2012/13 and 2013/14 were also mild with low snowpack resulting in mild winter conditions. However, the dry springs and summers of 2012 and 2013 negatively impacted summer and winter range forage production.

Habitat

Habitat data collection has been inconsistently collected in this herd unit and has been absent in the recent past.

Field Data

Moose surveys are done from a helicopter along with West Green River elk surveys. Classification data is collected during those flights. Those surveys are conducted every other year. The joint elk and moose survey was flown last year in the winter of 2013/14. Total numbers of moose seen were 406. Nearly complete coverage of occupied moose winter habitat was achieved in the survey. We are still working on a sightability correction factor for that survey since we are having problems with the model. In the off years some moose classification data is collected during aerial deer surveys in December. That data is reported in the JCR report graphs and tables but sample sizes are very inadequate and those ratios are not reliable.

Harvest Data

Antlerless harvest opportunity has been very limited in this herd unit. We have drastically reduced the number of licenses in the last six years. Type 1 hunts still have very good success rates. Hunt area 26 is considered a very good quality moose hunt with potential for trophy animals. Area 26 has ample public access and a variety of places to hunt moose. Hunts in areas 33, 36 and 40 are considered good hunts with good success rates but require more time to find moose spread out over large areas. Public access can be more challenging in these areas but access to moose hunting is still available. They are not typically considered trophy areas but mature animals do exist and are harvested. Harvest data from 33, 36 and 40 does not give us much information since sample sizes are very small. In Hunt area 26 harvest data has a better sample size. Tooth age data from Area 26 indicates we have an average age of harvest of 4.07 years old for 2014. Average antler spread in Hunt Area 26 was 37.64 for 2014.

Population

Currently there is no model for this moose herd. We collect classification data on moose during elk and deer flights. Calf ratios remain good. Bull ratios are very good with the last three helicopter surveys showing ratios in the high 70's. Field observations indicated that the herd declined considerably around 2007/2008. For four consecutive years in Area 26 we saw very low numbers of moose on post-season classification surveys. This was very concerning considering counting conditions were ideal in post-season 2007 and post-season 2010 surveys. We had also experienced a reduction in nuisance moose complaints and reduced field observations of moose. This information prompted us to reduce harvest on this herd significantly over during that time. After the more detailed survey conducted in March of 2014 resulted in 406 observed moose we felt confident that we could offer 50 licenses in the 2014 season. If we can refine the sightability correction for these surveys we may be able to produce a population model for that part of the herd.

Management Summary

Harvest opportunity was substantially limited in this herd from 2008 to 2014. We will remain fairly conservative for 2015. In Hunt Area 26 the 2015 hunting season will be no change from the 2014 season. In Hunt Areas 33, 36 and 40 we will keep the same number of licenses but Hunt Area 33 will be for **antlerless moose only** (except cow moose with calf at side). Moose in this area are confined to the riparian areas along the Green River. Due to high hunter success, and low densities of moose, this area cannot sustain much harvest every year. Antlerless harvest will only be allowed in Hunt Area 33 due to habitat concerns there. The objective and management strategy were last revised in 2004.

M417 - Lincoln
HA 26, 33, 36, 40
Revised 1/2006

