

Unit(s): 1 Species: Mountain Lion

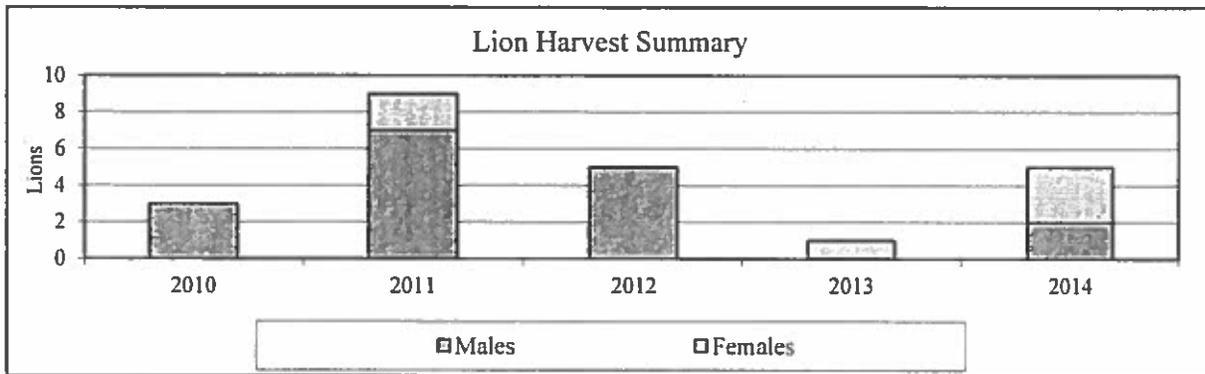
Year: 2014/2015

Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 3 | 0 | 3 | 0 | 0% | NO |
| 2011 | 7 | 2 | 9 | 1 | 11% | NO |
| 2012 | 5 | 0 | 5 | 0 | 0% | NO |
| 2013 | 0 | 1 | 1 | 0 | 0% | NO |
| 2014 | 2 | 3 | 5 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

- *Continue Single Unit Management
- *No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|-------------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | Unit 1 - Unitwide | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: T. Richins, J. Capps
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____

Date: _____

Management Notes:

It is recommended to maintain the standard hunt season structure for mountain lion without a female harvest limit, GMU 1. The 2-year mean of adult females harvested is less than 35%. This recommendation is within guidelines.

Hunt Recommendation Submitted by: Mountain Lion Unit 1

[Signature] 3/12/15
Wildlife Manager Date

[Signature] 3/12/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/12/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-22-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/31/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/14/15 accepted modified
Executive Staff Date

Comments:



Unit(s): 2ABC

Species: Mountain Lion

Year: 2015

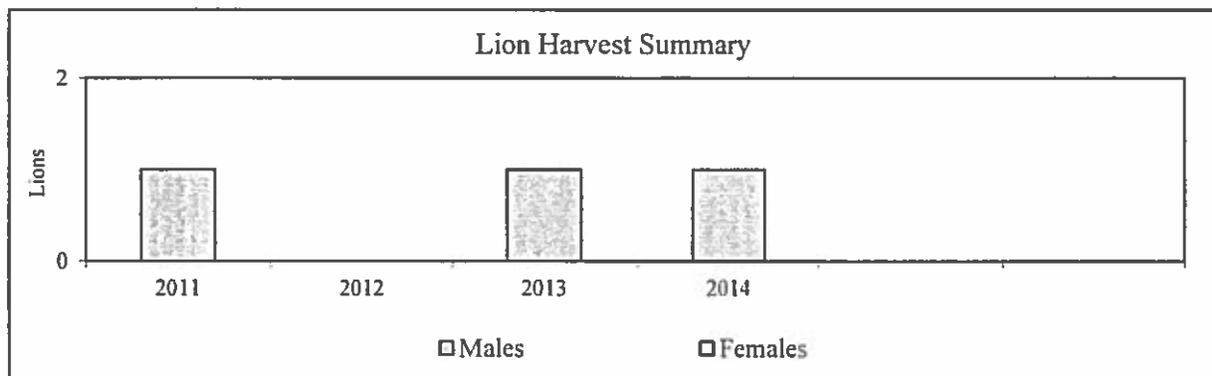
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2011 | | 1 | 1 | | 0% | NO |
| 2012 | | | 0 | | #DIV/0! | #DIV/0! |
| 2013 | | 1 | 1 | | 0% | NO |
| 2014 | | 1 | 1 | | 0% | NO |
| | | | 0 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



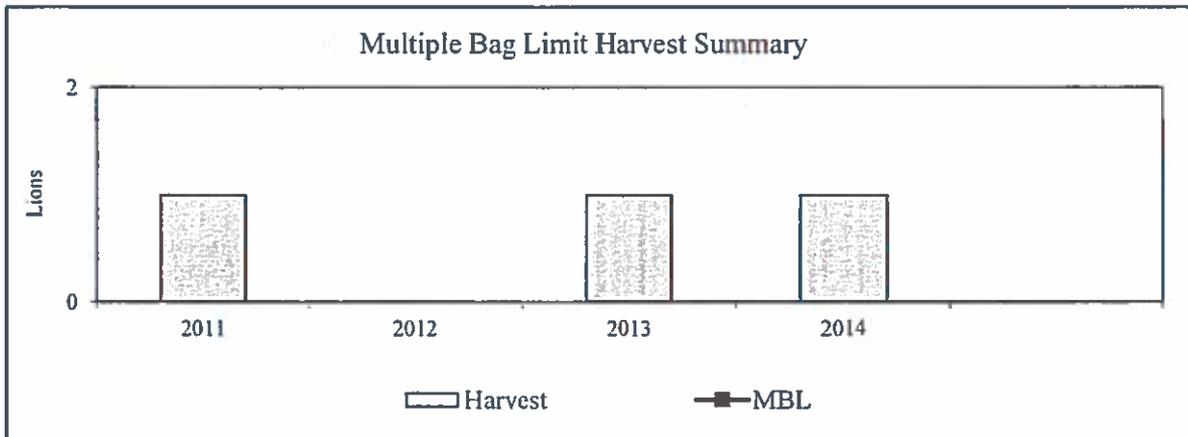
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|-------------------------------|----------------------|------------|--------------|
| Standard | July 1, 2015 to June 30, 2016 | Unit 2ABC, unit wide | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Joel Weiss
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Maintain current hunt structure of July 1, 2015 to June 30, 2016 season dates with bag limit of one mountain lion per year for the entire unit.

The current hunt structure in GMU 2ABC is an open season from July 1, 2015 through June 30, 2016 with a bag limit of one lion per year. This season and bag limit is consistent with most of the state.

Hunt Recommendation Submitted by: JOEL WEISS

Joel D. Weiss 3/12/15
Wildlife Manager Date

[Signature] 3/12/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/12/15 accepted modified
Game Specialist Date

Comments:

Chris Bergoli 3-22-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/31/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/14/15 accepted modified
Executive Staff Date

Comments:



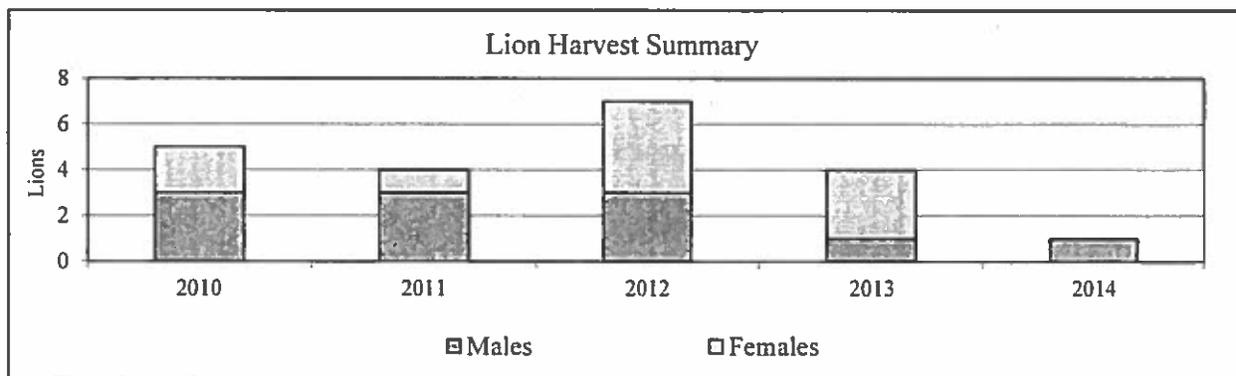
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 3 | 2 | 5 | 0 | 0% | NO |
| 2011 | 3 | 1 | 4 | 0 | 0% | NO |
| 2012 | 3 | 4 | 7 | 1 | 14% | NO |
| 2013 | 1 | 3 | 4 | 2 | 50% | YES |
| 2014 | 1 | 0 | 1 | | | |
| 2-Year Mean | | | | | 40% | YES |

Management Considerations:

*Evaluate Adjacent Unit Zone Management

*Consider Female Harvest Limit



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|-----------------------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | Unit 3A, 3B, 3C - Unit-wide | None | None |
| | | | | |
| | | | | |
| | | | | |

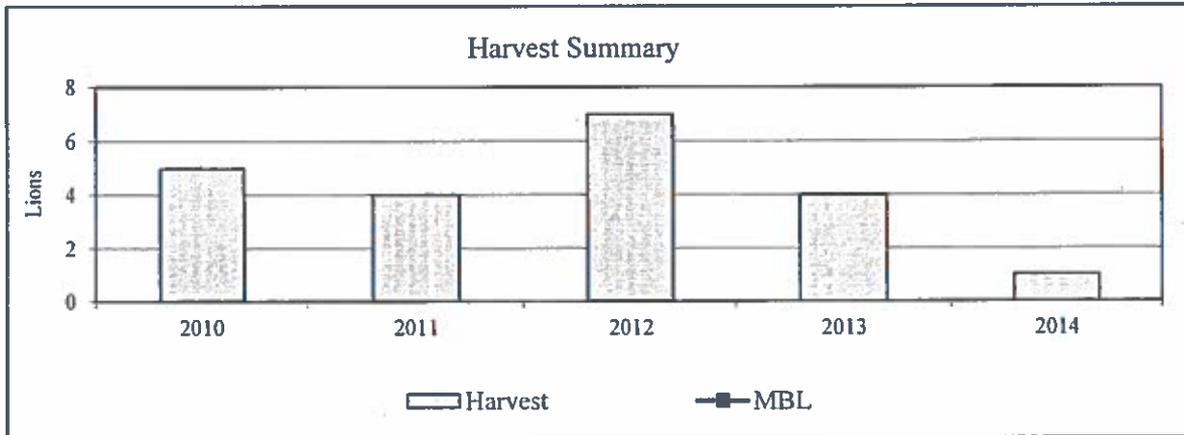
Submitted by: Eric Podoll
Wildlife Manager(s)

Amendments & Notes:

Reviewed by Bob Birkeland on 2-13-14

Game Branch Approval: _____

Date: _____



Significant Management Issues, Opportunities or Challenges:

Regional Notes:

We recommend no change in the lion seasons for Units 3A, 3B and 3C.

In 2014, only one lion was harvested; a male from Unit 3C.

In 2013, we have age data for three (3) lions, two females were harvested in Unit 3C and one male was harvested in Unit 3B. Both females that were harvested in Unit 3C were of breeding age, being three (3) years of age or older.

In 2012, we have age data for six (6) lions, two (2) males and four (4) females, all harvested in Unit 3C. Of the four (4) females, only one (1) was a breeding age adult.

In 2011, we have age data for four (4) lions and all were harvested in Units 3B and 3C. In addition, only one lion was a breeding age adult. Age Data in 2011: female - 2 years old (3C); male - 2 years old (3C); male - 5 years old (3C) and male - 3 years old (3B).

Unit(s): 3A 3B 3C Species: L16N

Year: 2014/15

Hunt Recommendation Submitted by:

Rust Roll 108
For Eric Podoll 184 3-12-15
Wildlife Manager Date

Rust Roll 108 3-12-15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/12/15 accepted modified
Game Specialist Date

Comments:

Chin Bagoshi 3-12-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/31/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/14/15 accepted modified
Executive Staff Date

Comments:



Unit(s): 4A/B

Species: Mountain Lion

Year: 2015/16

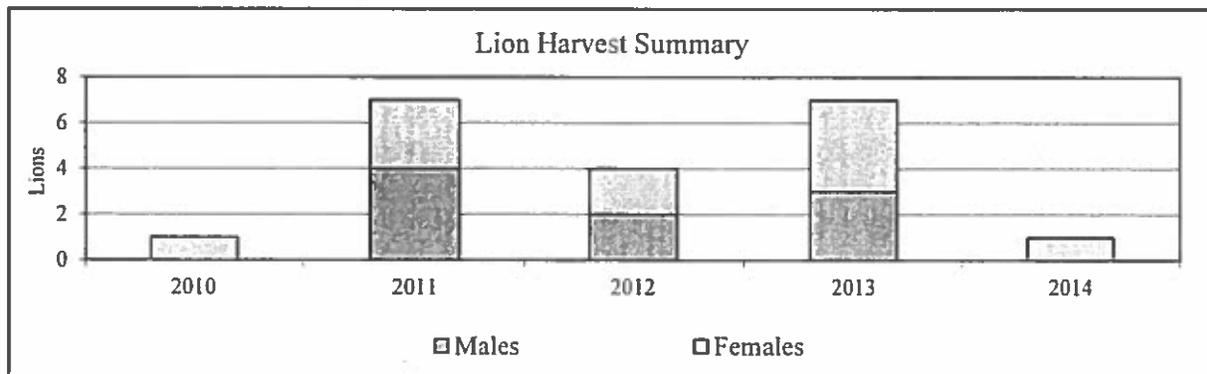
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 1 | 1 | 1 | 100% | YES |
| 2011 | 4 | 3 | 7 | 0 | 0% | NO |
| 2012 | 2 | 2 | 4 | 0 | 0% | NO |
| 2013 | 3 | 4 | 7 | 1 | 14% | NO |
| 2014 | 0 | 1 | 1 | | | |
| 2-Year Mean | | | | | 9% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|---------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | Units 4A & 4B | None | None |
| | | | | |
| | | | | |
| | | | | |

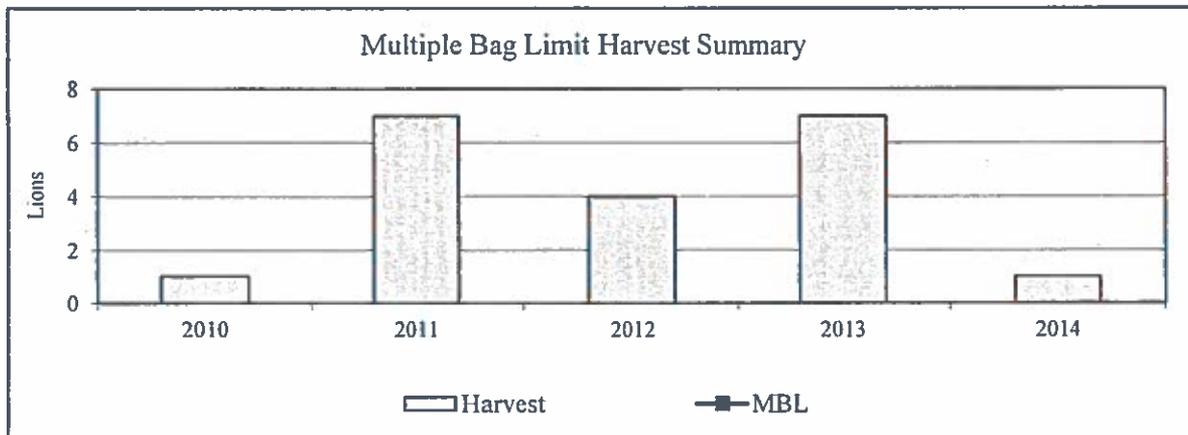
Submitted by: Ken Clay & Evan Lautzenheiser
Wildlife Manager(s)

Amendments & Notes:

Reviewed by B. Birkeland 2-19-15

Game Branch Approval: _____

Date: _____



Significant Management Issues, Opportunities or Challenges:

Regional Notes:

We recommend no change for lion management in Units 4A and 4B.

We combined Units 4A and 4B for Lion Management in 2010.

Age Data: 2009 - Male: 4 years old (Unit 4B)

2010 - Female: 1 year old (4B)

2011 - 3 females: all at 2 years old

2012 - 1 female less than 3 years old; 1 unknown

2013 - 1 female - 7 years old; 3 females less than 3 years old

2014 - female harvested no age data (4A)

Unit(s): 4A 4B Species: LION

Year: 2014/15

Hunt Recommendation Submitted by:

Robt Bill 168
For Ken Clay III 184
Wildlife Manager 3-12-15
Date

Robt Bill
Sector Supervisor 3-12-15 accepted modified
Date

Comments:

[Signature]
Game Specialist 3/12/15 accepted modified
Date

Comments:

Chris B...
Regional Supervisor 3-12-15 accepted modified
Date

Comments:

[Signature]
Game Branch Chief 3/31/15 accepted modified
Date

Comments:

[Signature]
Executive Staff 4/14/15 accepted modified
Date

Comments:



Unit(s): 27 Species: Mountain Lion

Year: 2014/15

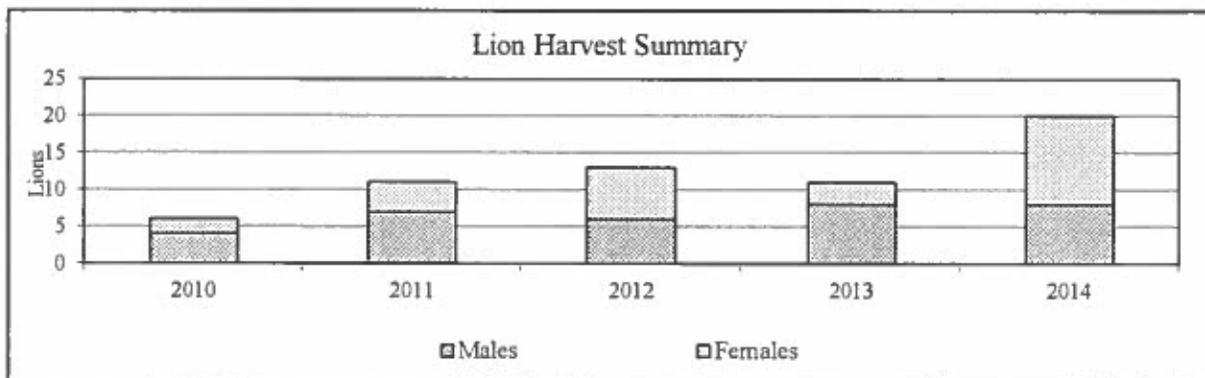
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 4 | 2 | 6 | 0 | 0% | NO |
| 2011 | 7 | 4 | 11 | 1 | 9% | NO |
| 2012 | 6 | 7 | 13 | 2 | 15% | NO |
| 2013 | 8 | 3 | 11 | 0 | 0% | NO |
| 2014 | 8 | 12 | 20 | | | |
| 2-Year Mean | | | | | 8% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

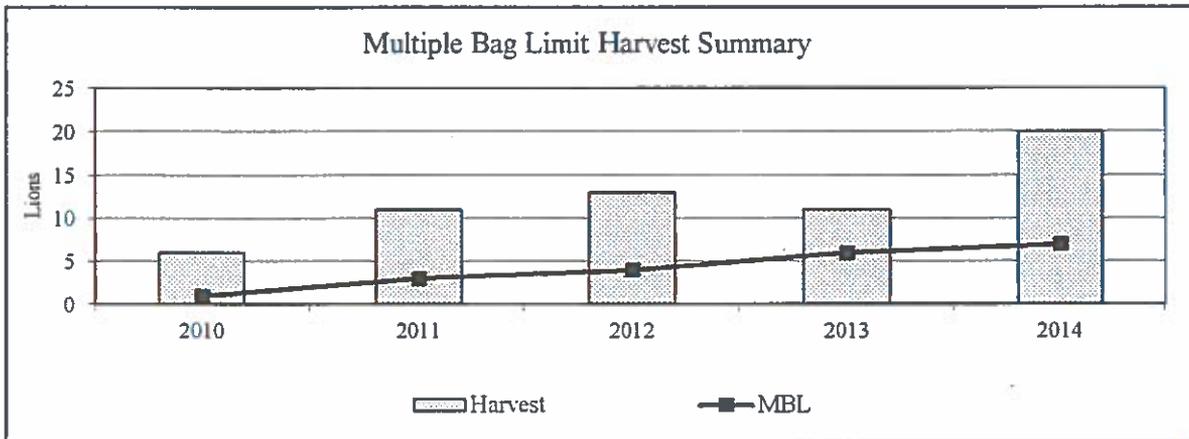
| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|-----------------------------|--|------------|--------------|
| Standard | July 1, 2015 -June 30, 2016 | Unit 27, except multiple bag limit areas | None | None |
| Multiple Bag Limit (MBL) | July 1, 2015 -June 30, 2016 | Upper Blue River Hunt Area in Unit 27 | 8 | None |
| Multiple Bag Limit (MBL) | July 1, 2015 -June 30, 2016 | Lower Blue River Hunt Area in Unit 27 | 10 | None |
| | | | | |

Submitted by: H.S. Najar, A. Hartzell
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____

Date: _____



Significant Management Issues, Opportunities or Challenges:

*In 2014 overall lion harvest increased substantially from where it has been over the last 10 years.

Regional Notes:

Recommendation : **Maintain** the standard year round season throughout Unit 27.
Maintain the Multiple Bag Limit hunt area in the Lower Blue River

Hunt Area

Maintain the Multiple Bag Limit hunt area in the Upper Blue River Hunt Area in Unit 27

The current hunt structure in GMU 27 is a recommended open season from July 1, 2015 through June 30th of 2016, with a bag limit of one lion per year. This season and bag limit is consistent with most of the state. Additionally there are currently two multiple bag limit areas in the Upper Blue River and Lower Blue River Hunt areas of Unit 27. These two areas allow for multiple bag limit lion hunting, addressing population needs of bighorn sheep.

It is recommended to **maintain** the "Lower Blue River Hunt Area in Unit 27" as is with a **MBL target of 10 animals**. This area was expanded when the Lower Blue River Hunt Area was established for the sheep hunt. With the data available it appears that two lions were killed in this area in 2014. The Area boundary and description for this hunt should again read as follows:

Beginning at the New Mexico State Line at the junction with US Highway 78; west along Highway 78 to Forest Road 212; northwest along FR 212 to the San Francisco River; southwest along the San Francisco River to Sardine Canyon; west along Sardine Canyon to US Highway 191; north along US Highway 191 to Forest trail 14 (AD Bar Trail); east along Forest trail 14 to the Blue River; south along the Blue River to the confluence of the Little Blue River; northeast along the Little Blue River to Forest trail #41; east along Forest trail 41 to the New Mexico State Line; south along the New Mexico State line to the junction with US Highway 78.

Unit(s): 27Species: Mountain LionYear: 2014/15

The recommended triggers to initiate and/or stop the Lower Blue River multiple bag limit hunts are as follows:

Initiate and/or continue the multiple bag hunt as long as the estimated sheep population is below 100 or there are two or more consecutive years with lamb recruitment below 35% at time of survey in the October/November survey period. This hunt will cease when the estimated sheep population is above 100 and the last two years of survey data indicates lamb recruitment is above 35%.

It is recommended to maintain the "Upper Blue River Hunt Area in Unit 27" as is with a MBL target of 8 animals. With low lamb:ewe and yearling:ewe ratios it is hoped that maintaining this MBL area will help the sheep population grow. In 2014 there were five lions killed within this MBL area. The Area boundary and description for this hunt should again read as follows:

Upper Blue River Hunt Area in Unit 27 - That portion of Unit 27 beginning at the Junction of U.S. Highway 180 and the New Mexico state line; south along the New Mexico state line to Forest Trail 41; northwest along Forest Trail 41 to the Little Blue River; south-southwest along the Little Blue River to the confluence of the Blue River; north along the Blue River to Forest Trail 14; west on Forest Trail 14 to U.S. Highway 191; north on U.S. Highway 191 to U.S. Highway 180; east on U.S. Highway 180 to the New Mexico state line.

The recommended triggers to initiate and/or stop the Upper Blue River multiple bag limit hunts are as follows:

Initiate and/or continue the multiple bag hunt as long as the estimated sheep population is below 225 or there are two or more consecutive years with lamb recruitment below 35% at time of survey in the October/November survey period. This hunt will cease when the estimated sheep population is above 225 and the last two years of survey data indicates lamb recruitment is above 35%.

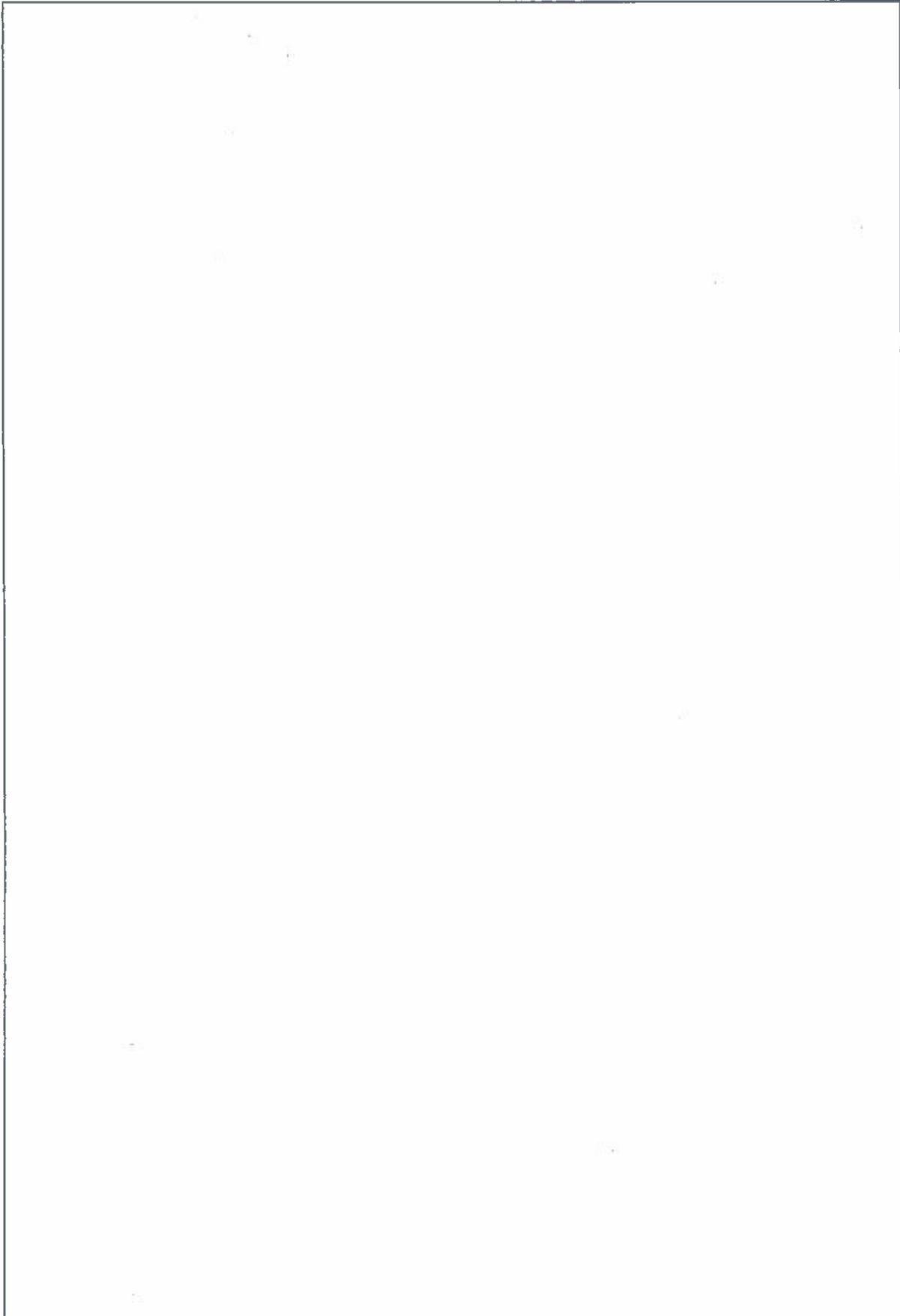
Multiple Bag Limit areas were established to allow for increased lion hunting opportunity and to assist in achieving population objectives for another species. In the case of the Upper and Lower Blue River MBL areas we are looking to assist sheep populations expand toward their potential. Current surveys in the Upper Blue River Hunt Area indicate an overall healthy population but low lamb and yearling to ewe ratios. Surveys were not conducted in the Lower Blue in 2014. Most recent surveys however reveal very few ewes and lambs as well as a disproportionate age structure of rams in the population. These MBL areas will be maintained until such time as the numbers and age structure indicate a healthy sheep population in either the Upper and/or Lower Blue River Hunt Areas.

In addition to monitoring the sheep populations, managers will also look at the age dynamics of harvested lions to ensure that we are not having a negative impact on the lion population. Current guidelines suggest that adult (≥ 3 years old) females should comprise $< 35\%$ of the overall harvest. The most recent two year mean indicates that only 8% of the harvest is composed of adult females.

Unit(s): 27

Species: Mountain Lion

Year: 2014/15



6

6

6

Unit(s): 27 Species: Mt. Lion

Year: 2014/15

Hunt Recommendation Submitted by:

[Signature] 3/12/15
Wildlife Manager Date

[Signature] 3/12/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/12/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-2-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/31/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/16/15 accepted modified
Executive Staff Date

Comments:



1 000 000

Unit(s): 13B/13BS

Species: Mountain Lion

Year: 2015/16

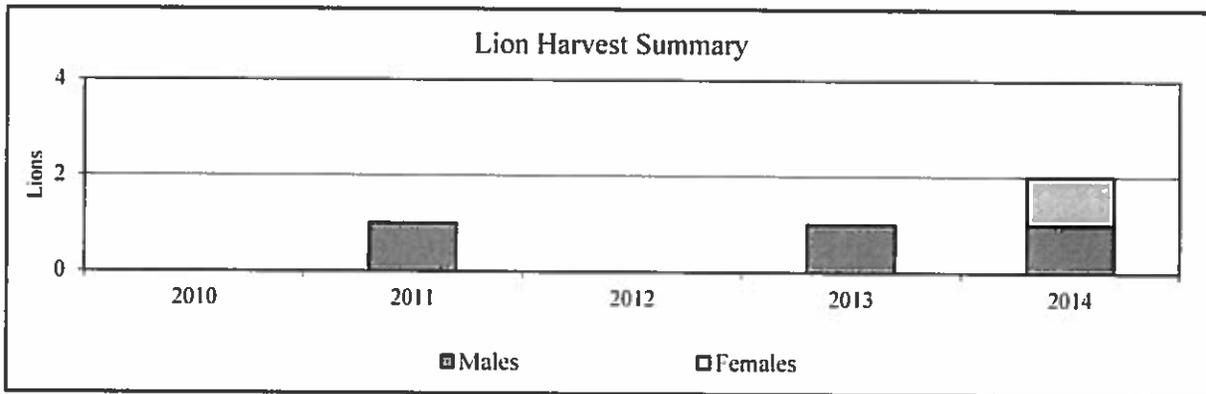
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 0 | 0 | 1 | #DIV/0! | #DIV/0! |
| 2011 | 1 | 0 | 1 | 0 | 0% | NO |
| 2012 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2013 | 1 | 0 | 1 | 0 | 0% | NO |
| 2014 | 1 | 1 | 2 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated

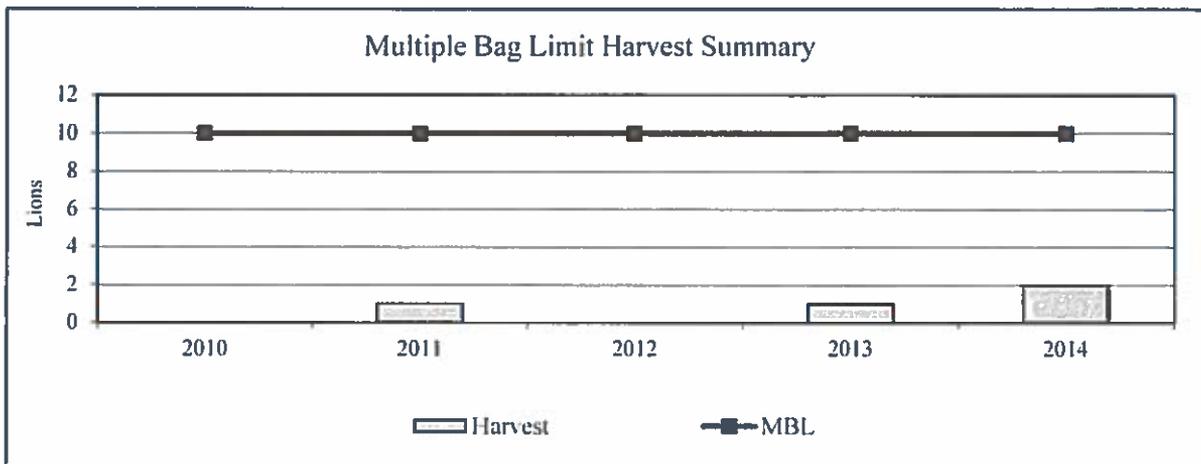


Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|------------------------------|--------------------------------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | 13B - Not Including the 13BS portion | None | None |
| Multiple Bag Limit (MBL) | July 1, 2015 - June 30, 2016 | 13BS | 10 | |
| | | | | |
| | | | | |

Submitted by: Tim Shurtliff
Wildlife Manager(s)

Amendments & Notes:



Significant Management Issues, Opportunities or Challenges:

The 13BS hunt unit has a multiple bag limit that has been in effect since 2002. ~17 mountain lions have been harvested as part of this hunt. The objective in establishing this multiple bag limit hunt was to 1) remove predatory pressure on a struggling 13BS bighorn sheep population in hopes to improve survival and lamb production, and 2) provide an incentive to mountain lion hunters to travel to 13B and harvest when they otherwise would not because of hunting areas in closer proximity to home.

Following a 2012 change in Commission Rule, licensed mountain lion hunters can now hunt mountain lions during a "Daylong" season in 13BS.

In recent years, triggers for the 13BS bighorn sheep population have been established that would determine the appropriateness of the multiple bag limit lion hunt. Those triggers have been clarified and are as follows:

To Continue the Hunt: The following stipulations apply:

1. A five-year average lamb:ewe ratio lower than what is recommended by Remington for a stable Arizona Bighorn Sheep Population (22:100);
2. A decline in the average number of class III and IV rams available for harvest within the population. The 15% threshold would be equal to 2 or fewer permits on the permit worksheet;

To End the Hunt: The following stipulations apply:

1. An average lamb:ewe ratio above what is recommended by Remington for a stable Arizona Bighorn Sheep Population (22:100), based on survey data for two consecutive survey periods;
2. An increase in class III and IV rams available for harvest. The 15% threshold would be equal to 3 or more permits on the permit worksheet;
3. No Lion Harvest for 3 consecutive years.

Recommendation and Discussion

In general 1 stipulation has been met to continue the hunt, and 1 stipulation has been met to end the hunt. It is recommended to continue the multiple bag limit hunt with the discussion below.

The 13BS mountain lion population has historically relied on mule deer as a primary prey base. In 13B, the migratory nature of the mule deer population brings mountain lions into the habitat of bighorn sheep during the winter months and resident mule deer encourage mountain lions to remain in proximity to the bighorn sheep. For many years, the 13B mule deer population was struggling with growth and the logical tenet was that mountain lions would rely on alternative prey.

Mountain lion predation on bighorn has been documented in the Grand Wash Cliffs and is a potential control on a struggling bighorn sheep population. In fact the 13BS bighorn population, until recent years, has experienced low lamb production, and ram survival. Data and biological knowledge suggested that mountain lion predation may be one factor limiting the 13BS bighorn population.

The multiple bag limit hunt provides an incentive to mountain lion hunters to harvest in 13BS when they normally would hunt elsewhere, while at the same time allowing the Department to use an effective predator management tool in management of the bighorn sheep population.

The mule deer population, the primary prey base of lions throughout 13B has increased in recent years. The fawn:doe ratio recorded during 2014 winter mule deer surveys was 58:100. The 3 year average is 70:100. In addition, survey numbers have increased over the past 10 years in 13B and the population is slowly growing.

Lion sightings and track sign are continually documented throughout the unit. In 2009, an archery deer hunter reported 4 mountain lions together on Black Rock Mountain. In 2010, several photographs at different time intervals showed 4 mountain lions together on Whitmore Point. 2 separate lions have been documented through track sign in the Mt. Dellenbaugh area for several years. In January 2012 the wildlife manager observed a mountain lion during deer surveys on the Grey Points. In 2013 and 2014 guides and hunters continue to get plenty of photographs of lions on their trail cameras and continue to voice their concerns to the wildlife manager.

Unit(s): 13B/13BS

Species: Mountain Lion

Year: 2015/16

These types of sightings were uncommon prior but not unexpected with current conditions in the unit - the mountain lion population is responding favorably to the mule deer prey base, despite the continued multiple bag limit hunt. In other words, the multiple bag limit hunt does not appear to be having an adverse impact on mountain lions.

Female harvest is not a concern in this unit. The sample size to derive this estimate is based on very low harvest numbers for a very large unit. In addition, as indicated, sightings have been documented, and the primary prey base population is increasing; suggesting again that the multiple bag limit hunt is not impacting the mountain lion population.

With the new license structure it has decrease the price for a non-resident to hunt mountain lions in AZ. Most of the harvests that come out of 13B and 13A come from non-residents. This may have a small impact on the number of lions that get harvested in 13B and in 13BS in the upcoming years.

Unit(s): 13B Species: MNT L.07

Year: 2014/15

Hunt Recommendation Submitted by:

[Signature] 3/11/15
Wildlife Manager Date

[Signature] 3/11/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/11/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3/11/15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/31/15 accepted modified
Game Branch Chief Date

Comments: Recommend removing the 13B South MBL season. This hunt has been in place more than 5 years + no increase in ML take has occurred. The triggers have not

[Signature] 4/17/15 accepted modified
Executive Staff Date

Comments:

been met but hunt is not being used by hunters.

Unit(s): 15BW, 15C, 15D Species: Mountain Lion

Year: 2014/15

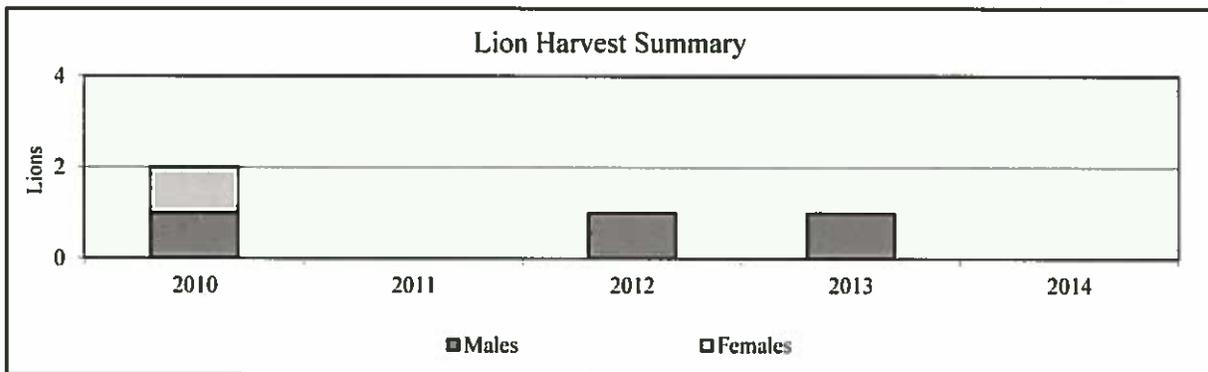
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 1 | 1 | 2 | | 0% | NO |
| 2011 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2012 | 1 | 0 | 1 | | 0% | NO |
| 2013 | 1 | 0 | 1 | | 0% | NO |
| 2014 | 0 | 0 | 0 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



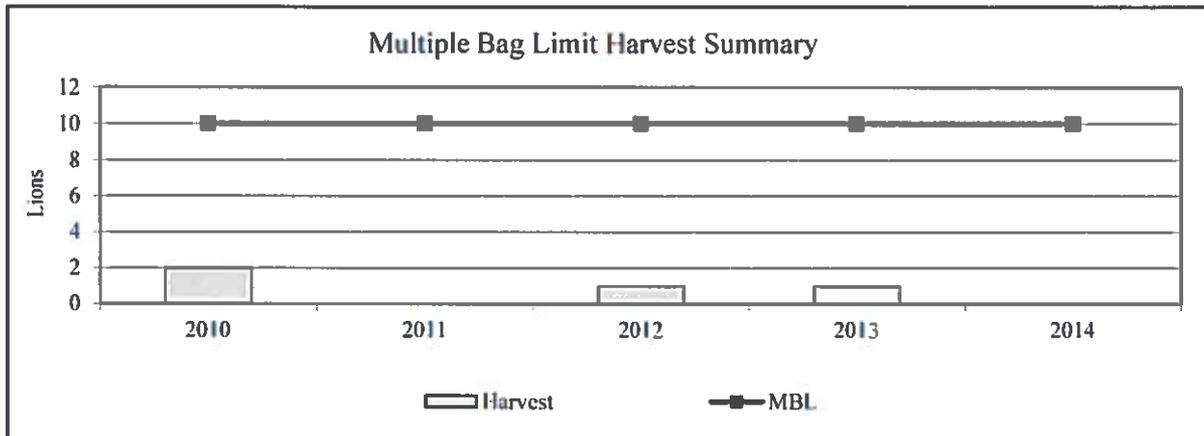
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|------------------------------|--------------------|------------|--------------|
| Multiple Bag Limit (MBL) | July 1, 2015 - June 30, 2016 | 15B West, 15C, 15D | 10 | 10 |
| | | | | |
| | | | | |
| | | | | |

Submitted by: B. Oleson
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Multiple Bag Limit Triggers are as follows:

- * Sheep/hour observed in Unit 15CS reaches the 20-year average of 18.1 sheep/hr. In 2013 sheep/hour observed was 9.1, down from 12.1 in 2012. Sheep were not surveyed in 15CS in 2014 but are not expected to have exceeded the 20-year average of 18.1 sheep/hr.
- * Total sheep observed in Unit 15CS reaches the 20-year average of >108 sheep. In 2013 total sheep observed was 52, down from 74 in 2012. Sheep were not surveyed in 15CS in 2014 but are not expected to have exceeded the 20-year average of 108 sheep.

In the 2004-2005 hunt season, Units 15BW, 15C and 15D were added to the multiple bag limit hunt area, as outlined in the Black Mountains Adaptive Predation Management Plan (updated 2010). A harvest objective of 10 lions was established. In the 2014-2015 hunt season, Units 15BW, 15C, and 15D were designated as minimal occurrence zones with liberalized mountain lion harvest strategies. The region recommends that the hunt area continue to be managed as a multiple bag limit area, in accordance with the Predation Management Plan, and not offer the liberal season structure of 3 mountain lions/hunter/day bag limit. The season should be yearlong with day-long hours.

No lions were harvested in 2012; however, one roadkill male was found, presumably hit by a vehicle crossing Highway 68 near Union Pass. In 2013 one male lion was reported harvested in Unit 15BW. No lions were reported harvested from the hunt area in 2014.

The Wildlife Manager saw a mountain lion in Unit 15CS on both survey flights in 2012 and 2013, and lion predation was documented in Unit 15BW by a regional wildlife technician in 2013. Lions may or may not be a contributing factor causing recent declines in sheep populations in Units 15BW, 15CS, and 15D.

Unit(s): 15, 16AN, 16AS/1885 Species: Mountain Lion

Year: 2014/15

Hunt Recommendation Submitted by: B. Oleson

[Signature]
[Signature]

Wildlife Manager

3-4-15
Date

[Signature]
Velma Holt - Bush

Sector Supervisor

3/4/15
Date

accepted modified

Comments:

[Signature]

Game Specialist

3/4/15
Date

accepted modified

Comments:

[Signature]

Regional Supervisor

3/4/15
Date

accepted modified

Comments:

[Signature]

Game Branch Chief

3/31/15
Date

accepted modified

Comments: Unit 16A North is recommended as a new MBL area

[Signature]

Executive Staff

4/1/15
Date

accepted modified

Comments:

Unit(s): 16AS/18BS

Species: Mountain Lion

Year: 2014/15

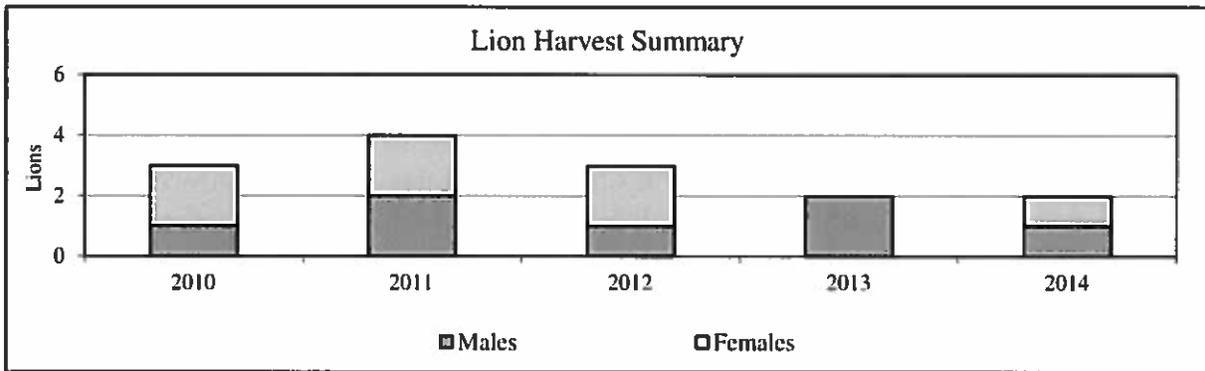
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|--------------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 1 | 2 | 3 | 2 | 67% | YES |
| 2011 | 2 | 2 | 4 | 1 | 25% | NO |
| 2012 | 1 | 2 | 3 | 0 | 0% | NO |
| 2013 | 2 | 0 | 2 | 0 | 0% | NO |
| 2014 | 1 | 1 | 2 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|------------------------------|-----------------|------------|--------------|
| Multiple Bag Limit (MBL) | July 1, 2015 - June 30, 2016 | Units 16AS/18BS | 15 | 15 |
| | | | | |
| | | | | |
| | | | | |

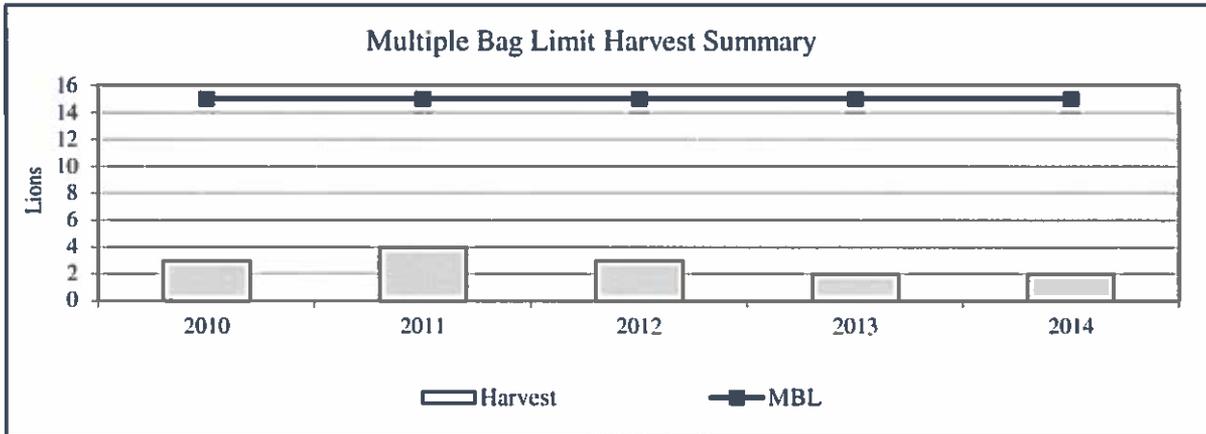
Submitted by: _____

Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____

Date: _____



Hunt Recommendation:

A multiple bag limit is recommended for Unit 16AS/18B to support an introduced bighorn sheep population in Unit 18BS and an augmented population in Unit 16A. The MBL has been in place since 2002; during which the harvest has averaged 2.6 lions per year. If we assume that 10% of the lion population is harvested each year, which is supported, that means there are approximately 26 lions in this hunt area. At this harvest rate, if we were attempting to remove 75% of the lions, the limit would be placed at 20 lions, which is supported by lion track surveys which indicated a high density of lions in the area. The MBL will remain at 15 lions for 2015-2016.

Multiple Bag Limit Trigger:

The MBL will be in place until the region determines that the bighorn sheep populations in Units 16A South and 18B South are self-sustaining.

Population Information:

Surveys were flown in both units this year with a population estimate of 100 sheep in Unit 18B South, while only 5 sheep were observed in Unit 16A South. Approximately 160 sheep have been transplanted into this area between 2006-2014 and predation rates have been as high as 66% after a release event. Lion predation continues to occur on sheep being monitored in Unit 16A South.

Hunt Area Boundary:

Those portions of Unit 16A and Unit 18B beginning in Wikieup at Chicken Springs Road and U.S. Hwy 93; north on U.S. Hwy 93 for 2.2 miles to Pump Station Road; east on Pump Station Road for 0.9 miles to Back Road; north on Back Road for 1.8 miles to Boner Canyon Road (unmarked); northeast on Boner Canyon Road to Bogles Ranch Road near SV Ranch headquarters (stay right at each road fork); south on Bogles Ranch Road for 3.5 miles to Black Canyon drainage; northeast in Black Canyon drainage to Francis Creek; southeast along Francis Creek to Burro Creek; northeast along Burro Creek to Conger Creek; southeast along Conger Creek to Conger Springhead; south on access road to Bozarth Mesa Road; east on Bozarth Mesa Road to Camp Wood (Yolo) Road, the Unit 17B-18B boundary; southwest on Camp Wood Road to AZ Hwy 96 in Bagdad; southeast on AZ Hwy 96 to the Santa Maria River; southwest along the Santa Maria River to Alamo Lake; westerly along the north shore of Alamo Lake to Alamo Road; northwest on Alamo Road to Chicken Springs Road; northeast on Chicken Springs Road to U.S. Hwy 93.

Unit(s): 16A North

Species: Mountain Lion

Year: 2014/15

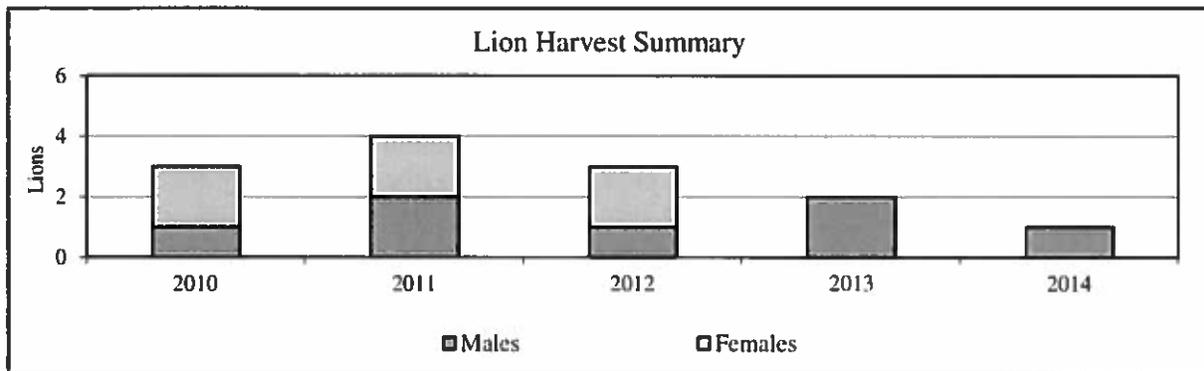
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|--------------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 1 | 2 | 3 | 2 | 67% | YES |
| 2011 | 2 | 2 | 4 | 1 | 25% | NO |
| 2012 | 1 | 2 | 3 | 0 | 0% | NO |
| 2013 | 2 | 0 | 2 | 0 | 0% | NO |
| 2014 | 1 | 0 | 1 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



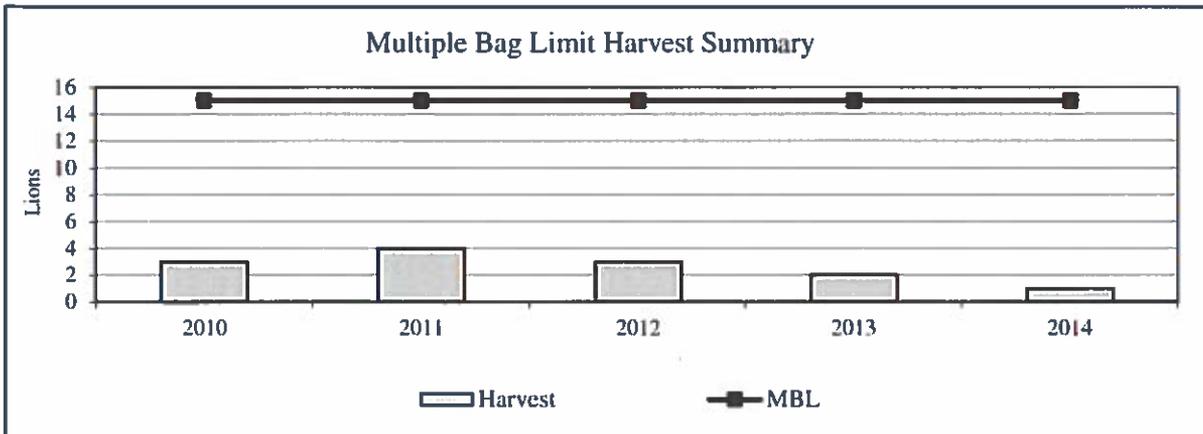
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|------------------------------|----------------|------------|--------------|
| Multiple Bag Limit (MBL) | July 1, 2015 - June 30, 2016 | Unit 16A North | 15 | 15 |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Region 3
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Hunt Recommendation:

A multiple bag limit is recommended for Unit 16A North to assist a depressed mule deer population. Funds are being expended as part of the Wildlife Habitat Enhancement Initiative (WHEI) to increase the amount of open habitat through burning and thinning projects and to increase the reliable water distribution throughout the unit for mule deer. The region is pursuing avenues to increase predator control efforts. As part of this effort the region believes that a multiple bag limit for this area would decrease the number of mountain lions in Unit 16A North and enhance the ability the habitat improvement efforts in assisting the mule deer population to recover.

From 1985-2001 the average harvest of lions per year in Unit 16A is 3.6. In 2002, the MBL in Unit 16A South/18B South was initiated. From 2002-2014 the average number of lions harvested in Unit 16A North was 2.4 while the harvest in the whole unit averaged 3.2. If we assume that 10% of the lion population is harvested each year then the estimated population in Unit 16A would be between 32-36 lions, conservatively. To effectively reduce mountain lion populations, sustained harvest of >40% of a mountain lion population over several years may be required (Stoner et al. 2006). A MBL of 15 removes over 45% of the population in Unit 16A North. The region recommends the MBL be placed at 15 lions for 2015-2016 and be re-evaluated next year based on harvest.

Multiple Bag Limit Trigger:

The MBL will be in place for the duration of the WHEI projects, and continue for at least 3 years after or until the goals of the predation management plan have been met. Goals in the plan include a) an increase in fawn:doe ratio to at least 40, b) an increase buck:doe ratio at or above guidelines (20-30) and c) an increase in deer seen per hour to 16 deer/hour.

Hunt Area Boundary:

Those portions of Unit 16A beginning in Kingman at Exit 48 on I-40; south and west on i-40 to U.S. Hwy 95 (exit 9); southerly on U. S. Hwy 95 to the Bill Williams River; easterly along the Bill Williams River to Alamo Lake; easterly along the north shore of Alamo Lake to Alamo Road; northwest on Alamo Road to Chicken Springs Road; northeast on Chicken Springs Road to U.S. Hwy 93; north and west on U.S. Hwy 93 and I-40 to Kingman (exit 48).

Unit(s): 16B Species: Mountain Lion

Year: 2015/16

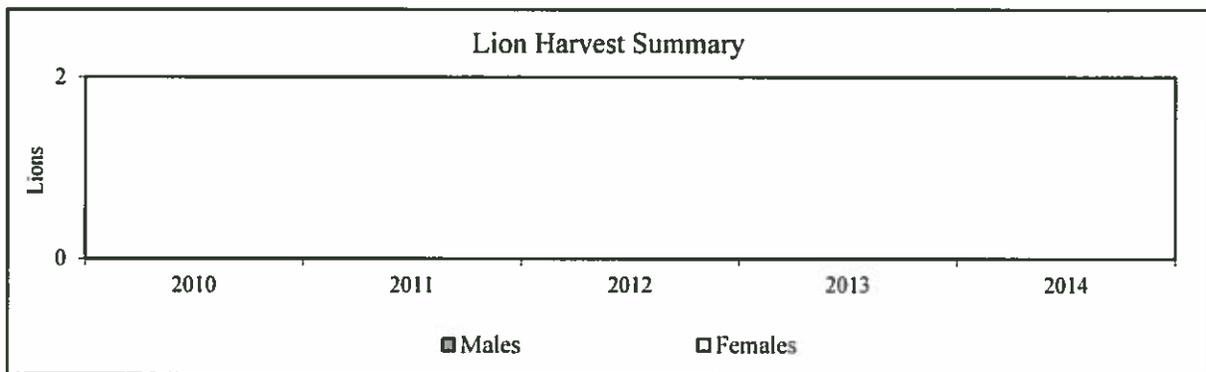
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2012 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2013 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2014 | 0 | 0 | 0 | | | |
| 2-Year Mean | | | | | #DIV/0! | #DIV/0! |

Management Considerations:

#DIV/0!

#DIV/0!



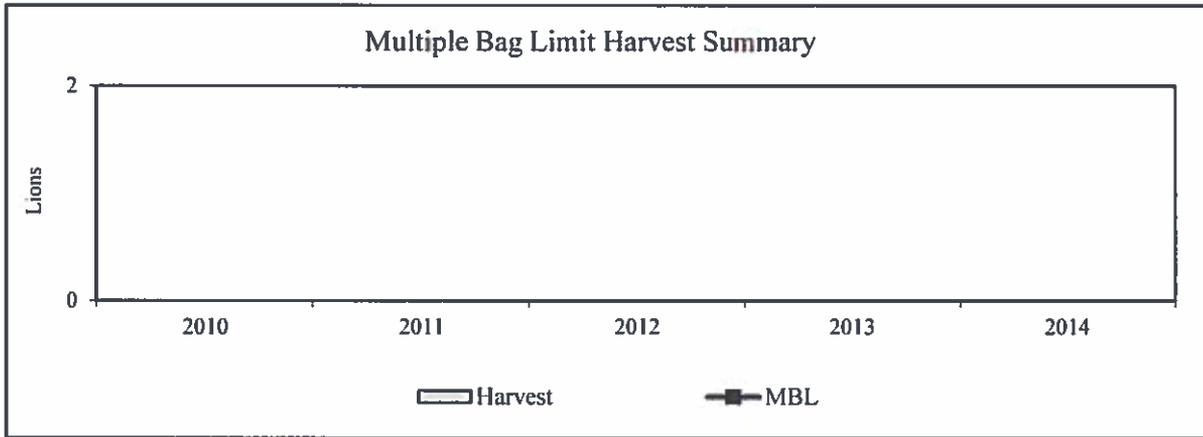
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: S. Ehret
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Regional Notes:

There are no records of any sport killed lions for this hunt unit. We occasionally receive reports of lion sightings from the public but these have not been substantiated. No lion sign has been documented in this unit in the last year.

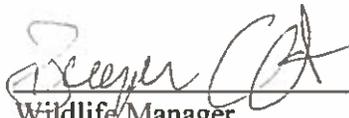
There have been sightings (2-3) of a mountain lion in January 2014 in Lake Havasu City (GMU 16A). Two of the sightings were investigated with no lion sign being detected. In September 2014, an individual living on the boundary of GMU 16A and 16B in Lake Havasu City described a lion cub, but no tracks or other sign of the animal were observed.

Unit(s): 16B

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:

 3-9-15
Wildlife Manager Date

 3-9-15 accepted modified
Sector Supervisor Date

Comments:

 3-9-15 accepted modified
Game Specialist Date

Comments:

 3-9-15 accepted modified
Regional Supervisor Date

Comments:

 3/31/15 accepted modified
Game Branch Chief Date

Comments:

 4/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 20C Species: Mountain Lion

Year: 2015/16

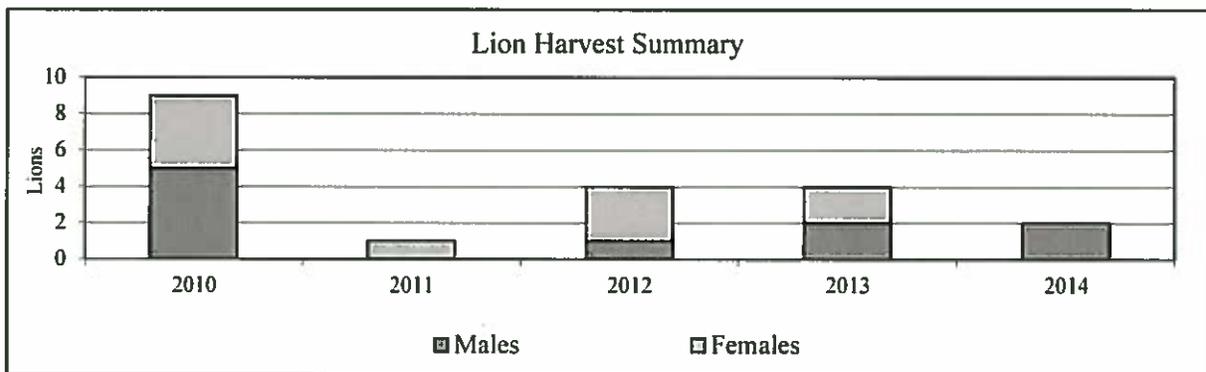
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 5 | 4 | 9 | 1 | 11% | NO |
| 2011 | 0 | 1 | 1 | 0 | 0% | NO |
| 2012 | 1 | 3 | 4 | | 0% | NO |
| 2013 | 2 | 2 | 4 | | 0% | NO |
| 2014 | 2 | 0 | 2 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



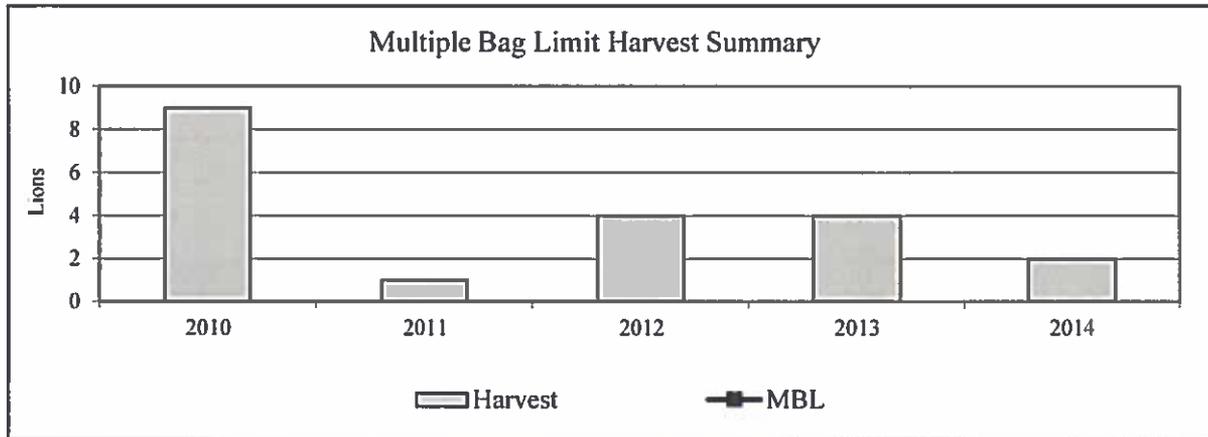
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|-----------------------------|------------|------------|--------------|
| Standard | July 1, 2015- June 30, 2016 | GMU 20C | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: J. Antolik
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges:

Survey Methods

There were no mountain lion targeted surveys conducted. Undoubtedly 20C has a healthy mountain lion population given past hunt data, abundant prey populations and relatively large blocks of unfragmented habitat.

Hunt Data

The 2014 harvest data indicated that 2 lions were harvested, both of which were sport harvested males.

Depredations

There were no depredation events in 2013.

Recommendation

Unit 20C is included in the Standard Lion Management Zone. Harvest trends will be managed to keep adult (≥ 3 year old) female harvest <35% of the total take. Two-year mean adult female harvest has not exceeded 35%. Continuing with the standard season structure is recommended.

Unit(s): 20C

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:

 HSW 3-9-15
Wildlife Manager Date

 3-9-15 accepted modified
Sector Supervisor Date

Comments:

 3-9-15 accepted modified
Game Specialist Date

Comments:

 3-9-15 accepted modified
Regional Supervisor Date

Comments:

 3/31/15 accepted modified
Game Branch Chief Date

Comments:

 4/10/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 39 Species: Mountain Lion

Year: 2015/16

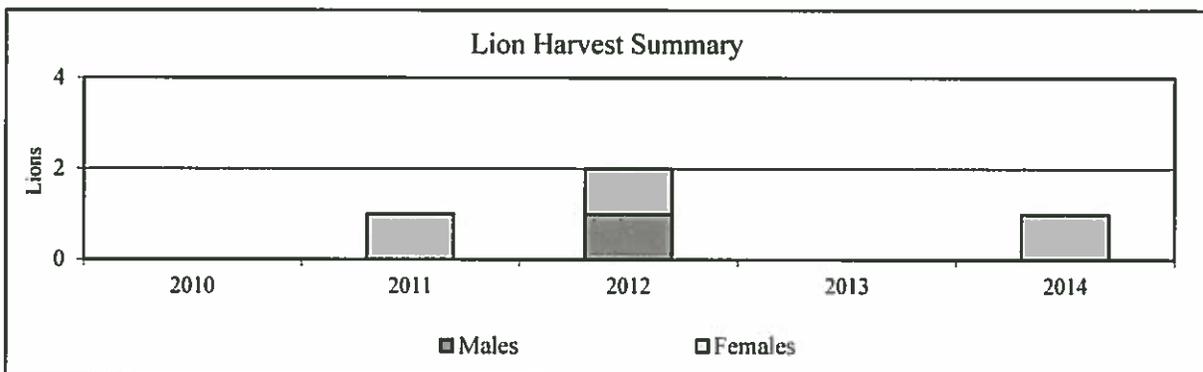
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | | | 0 | | #DIV/0! | #DIV/0! |
| 2011 | | 1 | 1 | | 0% | NO |
| 2012 | 1 | 1 | 2 | | 0% | NO |
| 2013 | | | 0 | | #DIV/0! | #DIV/0! |
| 2014 | | 1 | 1 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

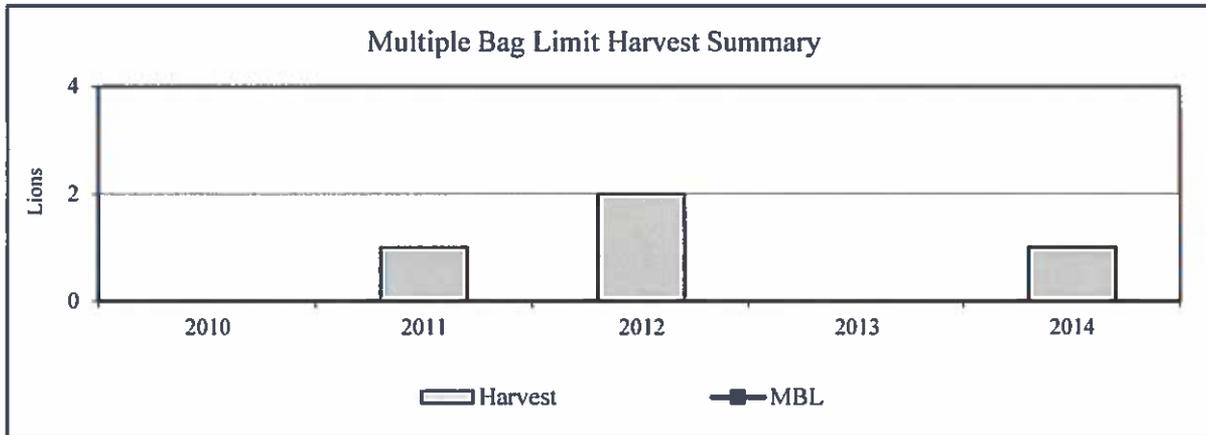
| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Liberal | July 1, 2015 - June 30, 2016 | 39 | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Brian Aragon
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____

44A



Hunt Recommendation: The lion hunt for GMU 39 is recommended to remain in the General (Bag Limit of 3 with daylong shooting hours) Mountain Lion season

Significant Management Issues, Opportunities or Challenges:

Hunting Mountain lion in GMU 39 is very difficult and in most cases is not successful. On average in the past several years only one lion is being harvested with the exception of 2012 when two lions were harvested. There are many opportunities to hunt lion but due to high temperatures, rugged terrain and extreme climate many hunters choose to hunt in different locations throughout the state.

During my time in the district while out on patrol I have found several signs of mountain lions (Tracks) in various washes located in the Maricopa Mountains and along the Oatman Farms agricultural fields. After speaking with a local farmer from Gila Bend who farms along the Gila River (Sunset Farms) he reported seeing multiple mountain lions traveling through his farm. The farmer also stated that during certain times of harvest his farm workers also reported to him seeing multiple mountain lions in the agricultural fields while spotlighting at night. Based off of conversation with the public, farmers and land owners I do not believe that night hunting of mountain lions is happening in GMU 39. I have not received any reports of night time hunting in GMU 39 nor have I received any requests for night hunting opportunities.

It is important to keep the opportunities for mountain lion available in order to promote Big Horn Sheep populations in the GMU. As of the past year I have not received any reports of Big Horn Sheep being killed by mountain lions but was recently told by the Region IV wildlife specialist (Mark Brown) that a lion that was collared in the Kofa monument was in the Painted Rock wildlife area (which is known bighorn sheep habitat).

Regional Notes:

Unit(s): 39

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:



Wildlife Manager 3/9/15
Date



Sector Supervisor 3-9-15 accepted modified
Date

Comments:



Game Specialist 3-9-15 accepted modified
Date

Comments:



Regional Supervisor 3-9-15 accepted modified
Date

Comments:



Game Branch Chief 3/31/15 accepted modified
Date

Comments:



Executive Staff 4/22/15 accepted modified
Date

Comments:

Unit(s): 40A Species: Mountain Lion

Year: 2015/16

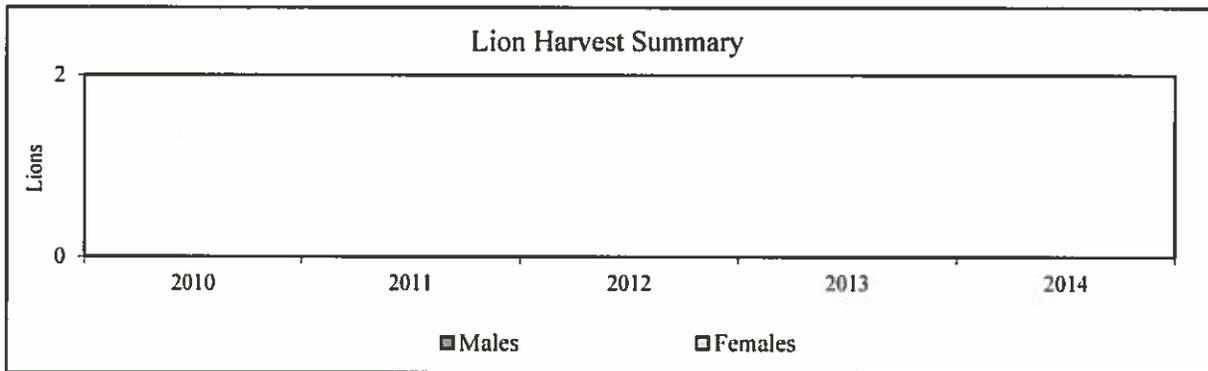
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2012 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2013 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2014 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2-Year Mean | | | | | #DIV/0! | #DIV/0! |

Management Considerations:

#DIV/0!

#DIV/0!



Hunt Recommendation:

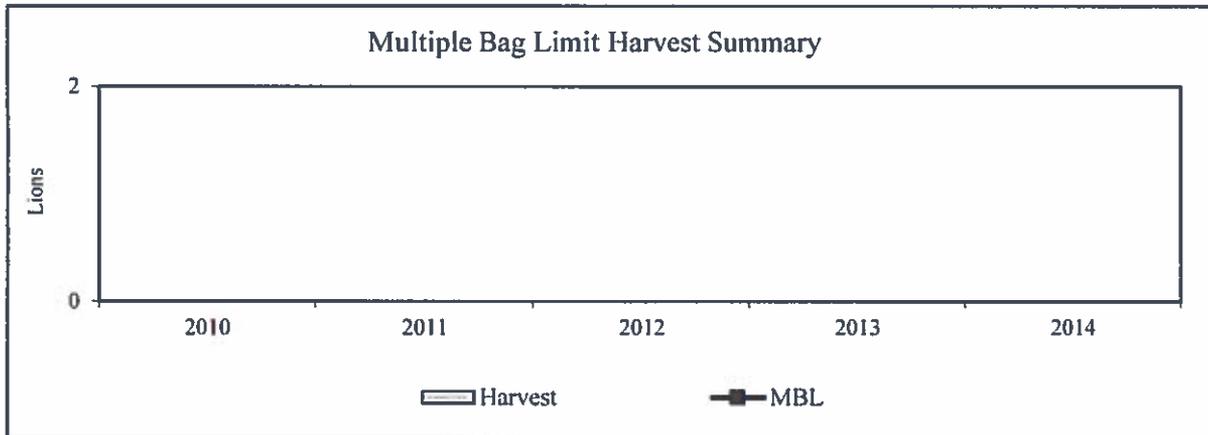
| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Liberal | July 1, 2015 - June 30, 2016 | 40A | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Brian Aragon
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____

44A

**Hunt Recommendation:**

The lion hunt for GMU 40A is recommended to remain in the General (Bag Limit of 3 with daylong shooting hours) Mountain Lion season

Significant Management Issues, Opportunities or Challenges:

Mountain lion hunting opportunities in the GMU are very high but due to several factors they are not acted upon. Factors include land access (BMGR, wilderness areas SNWM), lack of safety due to illegal drug smuggling, difficult terrain and high temperatures during summer months.

In 2005 GMU 40A became an MBL hunt unit and the hunting hours were extended to daylong.

Mountain lion kills in the GMU historically remain low. The last reported mountain lion kill was in 2008 while a hunter was out calling for predators. During my time in the district I have not received any reports of lion hunting at night nor have I received any inquires about night hunting in the GMU. Based off of the lack of reports or interest I do not believe that night time hunting for lions in taking place in the GMU.

The camera monitoring program is still being conducted on the BMGR by Luke Air Force Base biologists and the project is conducted year round. The project was started in May 2008 and has expanded since. The biologist (Aaron Alvidrez) has placed camera traps on most of the wildlife waters on the BMGR and the number of cameras has grown since the start of the project. After speaking with Aaron Alvidrez on many occasions about the project based off of his findings I believe the mountain lion population the GMU is stable.

Regional Notes:

Wildlife pressure from humans in high and the effect is unknown. The Vekol valley corridor and wilderness area are extremely dangerous due to illegal drug smuggling. Because of the peak in illegal drug and people smuggling in the area the presence of Border Patrol and BLM Rangers has increased which may be the reason for a decrease in hunters or people recreating on this portions of the GMU.

Currently there are no adaptive management plans for mountain lions in the GMU but information gained from a study like this would be beneficial for future hunt recommendations.

Unit(s): 40A

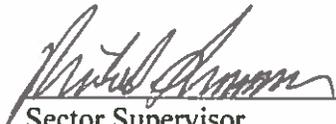
Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:



Wildlife Manager 3/9/15
Date



Sector Supervisor 3-9-15 accepted modified
Date

Comments:

Mark Brown

Game Specialist 3-9-15 accepted modified
Date

Comments:



Regional Supervisor 3-9-15 accepted modified
Date

Comments:



Game Branch Chief 3/31/15 accepted modified
Date

Comments:



Executive Staff 4/20/15 accepted modified
Date

Comments:

Unit(s): 40B Species: Mountain Lion

Year: 2015/16

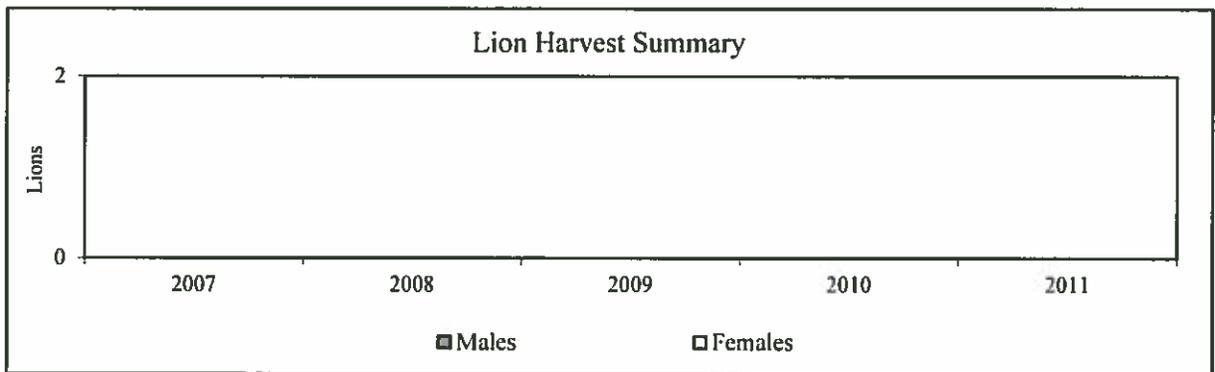
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2007 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2008 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2009 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2010 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | | | |
| 2-Year Mean | | | | | #DIV/0! | #DIV/0! |

Management Considerations:

#DIV/0!

#DIV/0!



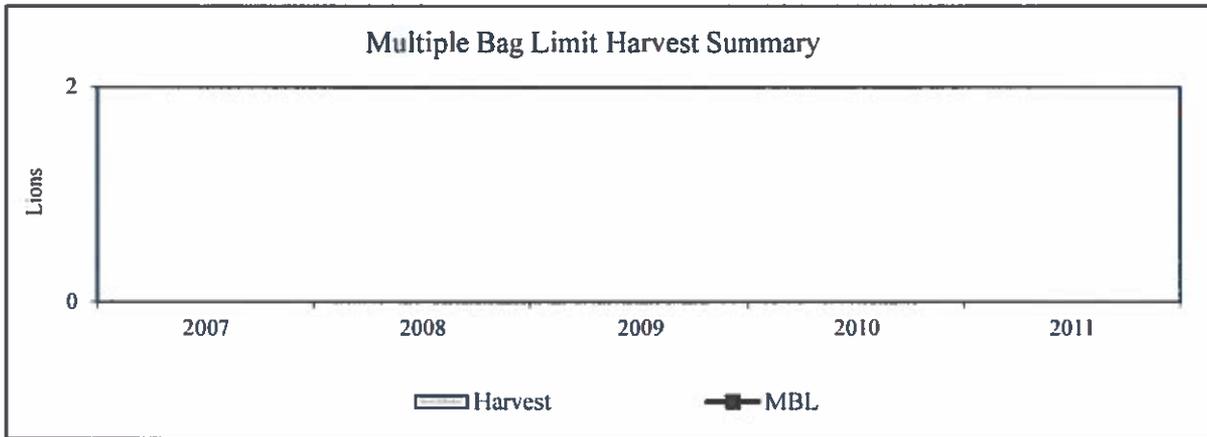
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Liberal | July 1, 2015 - June 30, 2016 | U-40B | | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Scott Fischer
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges

Regional Notes:

This unit is managed as two ranges, West and East.

East:

The eastern range extends from Highway 85 on the east side westerly to San Cristobal wash which is just east of the Mohawk Mountains. In this area over the past ten years there have been several sightings of Mountain Lions. Several lion kills are also believed to have occurred in or near this area.

In 1999 there was an additional Pronghorn mortality that was investigated by AZGFD personnel and confirmed that the death was the product of lion predation. This kill was within a mile of the Cabeza Refuge boundary and is believed to be attributed to a lion that was transient.

In 2009 a lion was repeatedly observed on the North Tactical bombing range by the Luke AFB Sonoran Pronghorn monitoring crew. It was found 3 consecutive days in the same area. It is believed, due to this activity, it had killed and was feeding on one of the Pronghorn known to frequent the area.

In 2011 during the November General Deer hunt as well as during the December Archery deer hunt Mountain lion sightings were reported to the department in an area north of the BMGR boundary near Spot Farms.

No known resident lions have been documented in the Eastern half of 40B. The public does not frequent this area due to Military land status, however there are numerous biological activities and military personnel on the ground managing operations daily. It is believed that if a resident lion was present evidence would be apparent and discovered readily. Additionally the deer population in this unit is not sufficient to sustain a resident lion, further strengthening the thought that any confirmed lion in the unit should not stay long before transitioning out to better habitat.

West:

The western portion of this unit stretches from San Cristobal wash on the eastern boundary westerly to Arizona's Western border with California and Mexico. In the past 20 years there have been five confirmed sightings of a Mountain Lion in the unit.

A trail camera survey was conducted in 2002 at several water tanks in the Tinajas Altas Mountains near the United States / Mexico border. During that camera survey a lion was positively identified while drinking at the southern-most water catchment.

Between that time and 2012 there have been several un-confirmed reports of lions in the unit, all of which have been investigated using various techniques. No tracks or scat has ever been found at the sights of these reports and several cameras have been placed on waters near the reported areas with no successful capture of lion images.

During the summer season of 2012 a sheep tag holder placed cameras at waterholes in the Mohawk Mountains. In August of 2012 at AGFD catchment #864 several pictures were taken of an adult lion while watering. Images were only captured on one night. The camera was at the site from July through September with only the one occurrence at #864. Approximately three weeks prior to this in July there were images collected at Eagle Tank in the Sierra Pinta Mountains of GMU 46B. The lion looks to be the same size as that of the lion at #864 but definitive identification is was not possible via photograph. It is the belief of Region IV Biologists that this is the same lion due to proximity and time.

In December of 2012 a guide for one of the Bighorn Sheep hunters from hunt 6023 (Tinajas Altas) claims to have spotted and glassed a mountain lion for better than 30 minutes during the opening week of the 2012 hunting season. His description and background with mountain lions lends credibility to his report, as does the location being near that of the occurrence that was photographed in 2002.

Similar to the occurrence at catchment #864, a sheep tag holder in for 2013 Mohawk/Copper 40B sub-unit hunt captured an image of an adult lion at South Copper tank in the Copper Mountains. Several images of the lion were captured on the trail camera on the night of December 10, 2013. When AZGFD personnel investigated this no tracks were found however several scrapes were discovered that were attributed to the lion. It should be mentioned that this was likely the same lion that several months prior killed a class IV ram near Buck tank in GMU 46B which is approximately 5 miles from South Copper tank.

The last and most recent sighting was in June of 2014. A Departmental trail camera was set on South Copper tank and captured images that were confirmed as a young, likely female, lion at the water hole. It is believed that this lion moves between the Refuge to the south and the southern end of the Copper Mountains. Several coyote kills have been confirmed in the Copper Mountains and to date no sheep mortalities have been attributed to lion predation.

It is very unlikely a lion will remain in the unit due to lack of a primary prey source, however occurrences, sightings, and kills seem to be more frequent in the past four years suggesting possible residency.

It is becoming increasingly apparent that the lion is not transitory in nature, any progress concerning the potential presence of a lion in this area will be taken seriously. Monitoring measures are in place to ensure that any affects this lion may cause to the sheep population of the area will be noticed as soon as possible. This will allow the Department to manage this predator in an area.

History:

Lion harvest was open in this unit prior to 1990 at which time it was closed. In 1997 the unit was added to a combined harvest objective group with units 16B, 41, 43A, 43B, and 44B. In 2007 these same units were reverted back to the statewide objective of 1 lion per calendar year per hunter. Harvest reporting shows that there has never been a lion taken in the western portion of 40B. Of note is that in 1982 a lion was harvested in the eastern portion of 40B in the crater range. Currently this unit falls under the Liberal 3 lion bag limit hunt structure.

Hunt Recommendation Submitted by:

Wildlife Manager

Date

accepted modified

Sector Supervisor

Date

accepted modified

Game Specialist Date

Date

accepted modified

Regional Supervisor

Date

accepted modified

Game Branch Chief

Date

accepted modified

Executive Staff

Date

Unit(s): 40B

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:



Wildlife Manager 3/9/15
Date



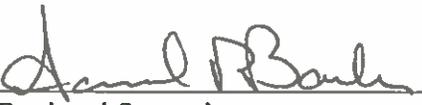
Sector Supervisor 3-9-15 accepted modified
Date

Comments:



Game Specialist 3-9-15 accepted modified
Date

Comments:



Regional Supervisor 3-9-15 accepted modified
Date

Comments:



Game Branch Chief 3/31/15 accepted modified
Date

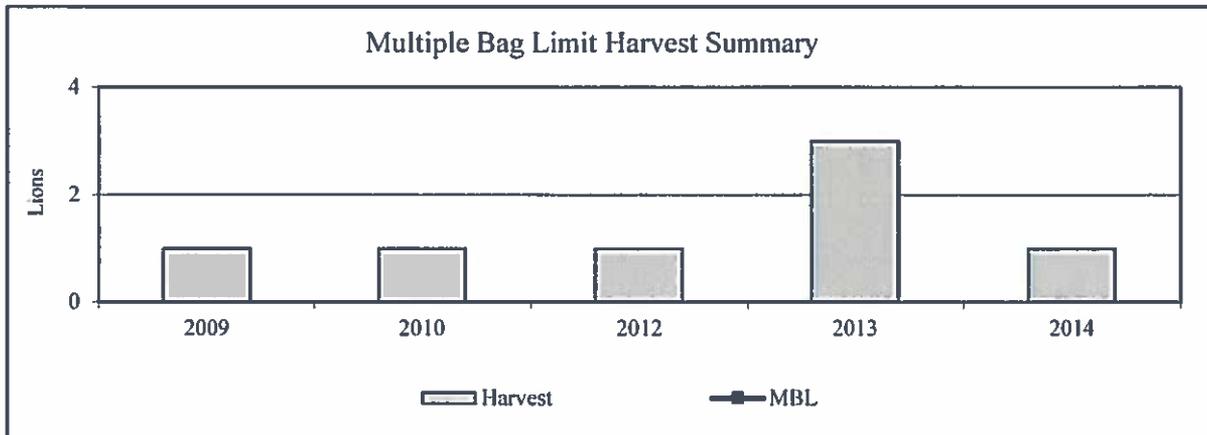
Comments:



Executive Staff 4/20/15 accepted modified
Date

Comments:

44A

**Hunt Recommendation:**

Recommend mountain lion hunt remains a General (Bag Limit of 3 with Daylong Shooting Hours) Season.

Significant Management Issues, Opportunities or Challenges:

Local hunters have reported several lion sightings within the Wellton and Mohawk Valley. A local farmer in the Radium Hot Springs area allegedly hit a lion with his truck in August. Evidently, the lion ran off into the desert. Several follow up reports by local hunters have stated they have seen the lion, lion kills, and tracks in the same area that has a high density of deer. The reports have not indicated the lion to be a threat to humans.

The wildlife manager suspects a resident lion in the Texas Hill area. Local farmhands have reported seeing a lion over the past years. This past December fresh lion tracks were confirmed in the Gila River; a week after a collared lion (KM012) was detected in the same area and had left. The plan is to deploy trail cameras to confirm the presence of another lion. The reports have not indicated the lion to be a threat to humans.

The wildlife manager shares lion biology and photos of confirmed lion signs to assist local hunters in more accurate identification of lion activity and signs. Hunters have a better opportunity with this information to harvest or accurately report lions in GMU 41.

Regional Notes:

In 2014, one female lion (two year old) was harvested by a hunter west end of the Eagle Mountains.

Structured surveys for lions are not completed within the region. The region accumulates data from satellite-collars, sightings, lion signs, lion kills, and road kills reported to the department.

GMU 41 is in the Kofa Mountains Complex Predation Management Plan area. A lion biologist is capturing lions and collaring them as part of a monitoring plan. The plan monitors their movements and records their diets. The plan includes lethally removing offending lions that have killed at least 2 bighorn sheep within a 6 month period.

The 2014-2016 Hunt Guidelines created a "Minimal Occurrence Lion Management Zone" too include GMU 41. Region IV initiated an Adaptive Lion Management Plan too include GMU 41.

Unit(s): 41

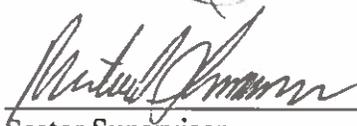
Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:



Wildlife Manager 3-9-15
Date



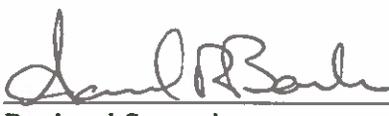
Sector Supervisor 3-9-15 accepted modified
Date

Comments:

Mark Brown

Game Specialist 3-9-15 accepted modified
Date

Comments:



Regional Supervisor 3-9-15 accepted modified
Date

Comments:



Game Branch Chief 3/31/15 accepted modified
Date

Comments:



Executive Staff 4/20/15 accepted modified
Date

Comments:

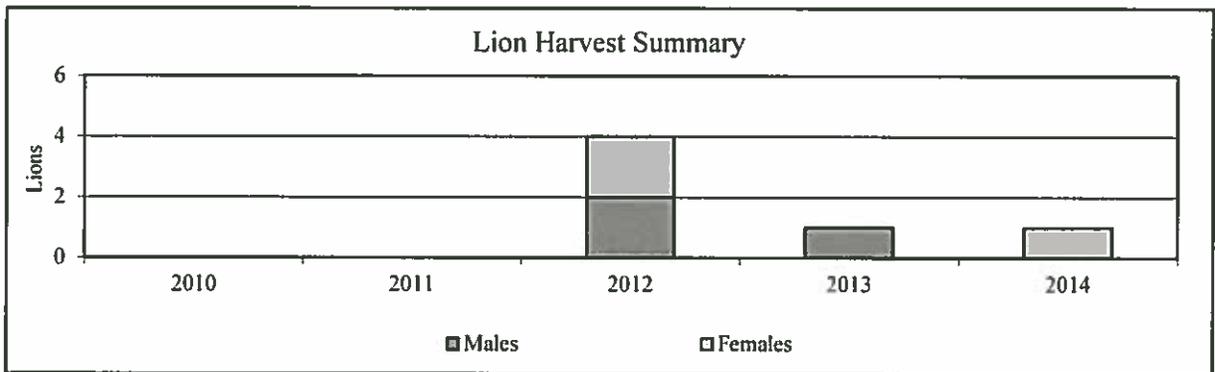
Unit(s): 42 Species: Mountain Lion

Year: 2014/15

Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2012 | 2 | 2 | 4 | 2 | 50% | YES |
| 2013 | 1 | 0 | 1 | 0 | 0% | NO |
| 2014 | 0 | 1 | 1 | | | |
| 2-Year Mean | | | | | 40% | YES |

Management Considerations: *Evaluate Adjacent Unit Zone Management
*Consider Female Harvest Limit



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|-----------------------|------------|--------------|
| Liberal | July 1, 2015 - June 30, 2016 | 42 Unitwide (daylong) | 3 | None |
| | | | | |
| | | | | |
| | | | | |

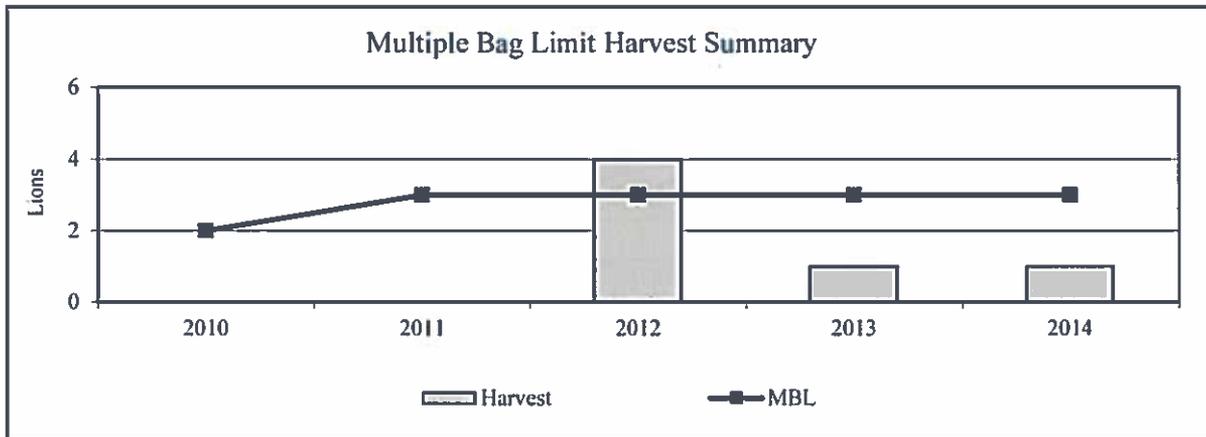
Submitted by: Craig Heath
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____

Date: _____

44A

**Hunt Recommendation:**

The mountain lion hunt for GMU 42 is recommended to remain in the General (Bag Limit of 3 With Daylong Shooting Hours) Mountain Lion Season.

Significant Management Issues, Opportunities or Challenges:

*Lion predation on the transplanted bighorn sheep population in GMU 42.

*Limited number of mountain lion hunters in GMU 42 (hot and dry with lots of cactus).

*

Regional Notes:

The lion hunting in GMU 42 has been managed under a multi-bag harvest structure for eight years. This structure was devised to help manage the bighorn sheep population in the south half of the unit. Even with the multi-bag structure, no lion hunters have harvested a lion in the south part of the unit (sheep habitat) and no hunter has harvested more than one lion.

One lion was removed from GMU 42 in 2014. This lion was an adult female (6 years old) that was captured and outfitted with a radio collar in July 2014. In August 2014 this lion killed an adult ewe near Sugarloaf Mountain and was removed as part of the Adaptive Lion Management Plan in Region IV. This was the only lion harvested in GMU 42 in 2014.

As part of the 20C, 42, 44A, and 44B Adaptive Lion Management Plan, Region IV continues to actively capture, collar, and monitor lions. One collared female lion (RF10) is still active in GMU 42. She spends most of her time in the Vulture Mountains south of Wickenburg.

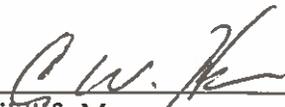
Two collared ewes were killed by lions in 2014. These sheep were not killed by a collared lion. These two bighorn sheep were killed approximately one month apart and were close enough to be killed by the same lion. Lion predation on this bighorn sheep population continues to be an issue.

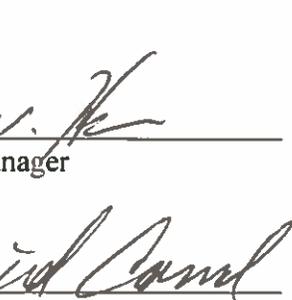
Unit(s): 42

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:

 3/9/2015
Wildlife Manager Date

 3-9-15 accepted modified
Sector Supervisor Date

Comments:

 3-9-15 accepted modified
Game Specialist Date

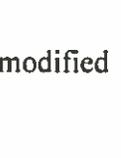
Comments:

 3-9-15 accepted modified
Regional Supervisor Date

Comments:

 3/31/15 accepted modified
Game Branch Chief Date

Comments:

 4/20/15 accepted modified
Executive Staff Date

Comments:

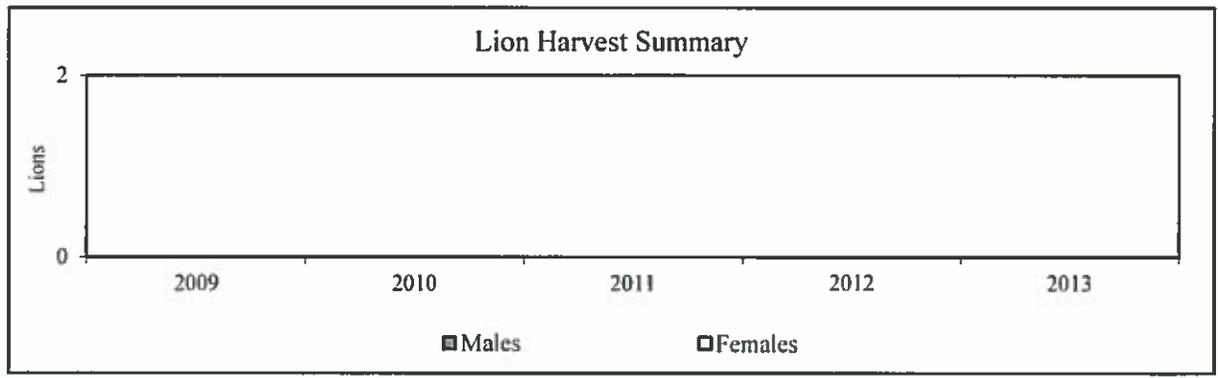
Unit(s): 43A Species: Mountain Lion

Year: 2015/16

Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2009 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2010 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2012 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2013 | 0 | 0 | 0 | | | |
| 2-Year Mean | | | | | #DIV/0! | #DIV/0! |

Management Considerations: #DIV/0!
#DIV/0!



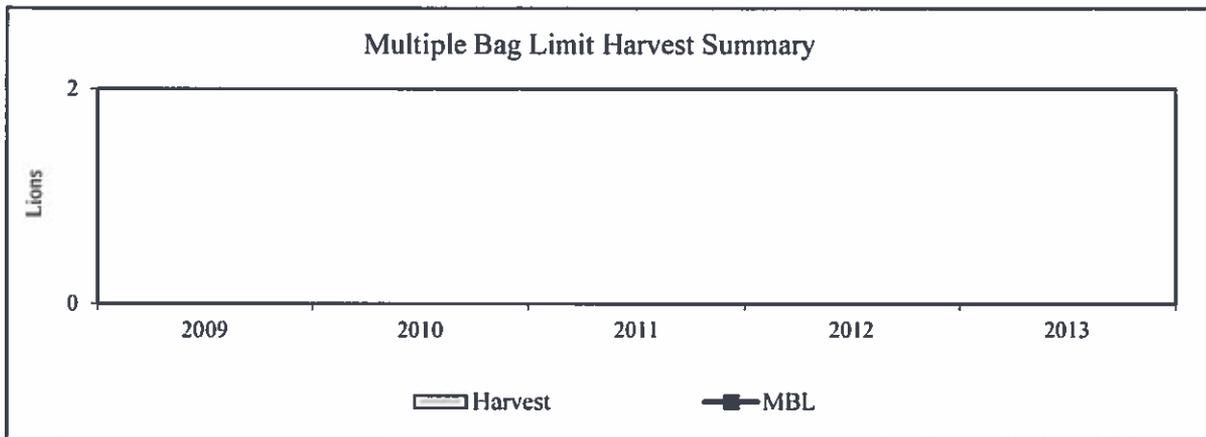
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|----------------------------|------------|------------|--------------|
| Liberal | July 1, 2015-June 30, 2016 | | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: C. Shanley
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges:

In the last five years there has been no record of a mountain lion being harvested in GMU 43A.

It should be assumed that mountain lions are using this unit due to availability of prey and proximity to the Colorado River and many other water and prey sources. No mountain lion sightings were substantiated in the unit in the last year.

It is recommended that 43A should continue to be managed under the liberal "Bag Limit of 3 with Daylong Shooting Hours" hunt structure.

Unit(s): 43A

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:

Courtney Shanley 3/9/15
Wildlife Manager Date

[Signature] 3-9-15 accepted modified
Sector Supervisor Date

Comments:

Mark Brown 3-9-15 accepted modified
Game Specialist Date

Comments:

David B. Bauler 3-9-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/31/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): U43B Species: Mountain Lion

Year: 2015/16

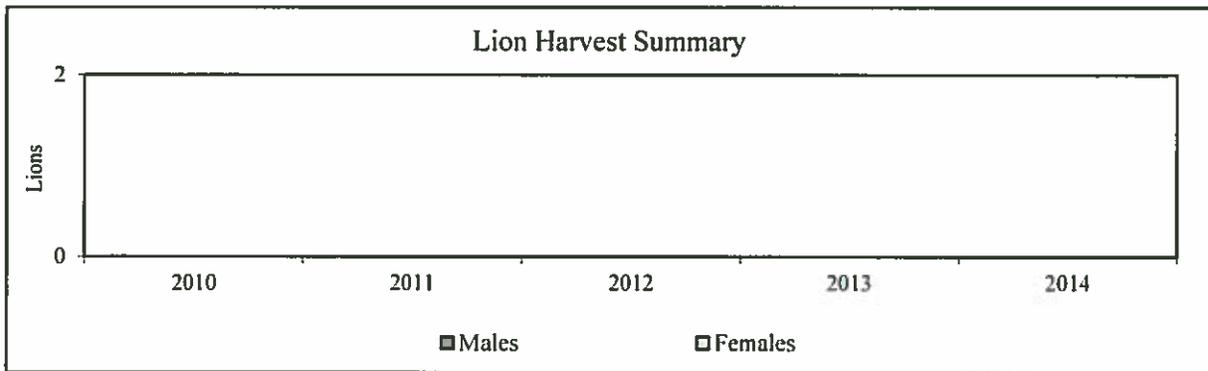
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2012 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2013 | 0 | 0 | 0 | | #DIV/0! | #DIV/0! |
| 2014 | 0 | 0 | 0 | | | |
| 2-Year Mean | | | | | #DIV/0! | #DIV/0! |

Management Considerations:

#DIV/0!

#DIV/0!



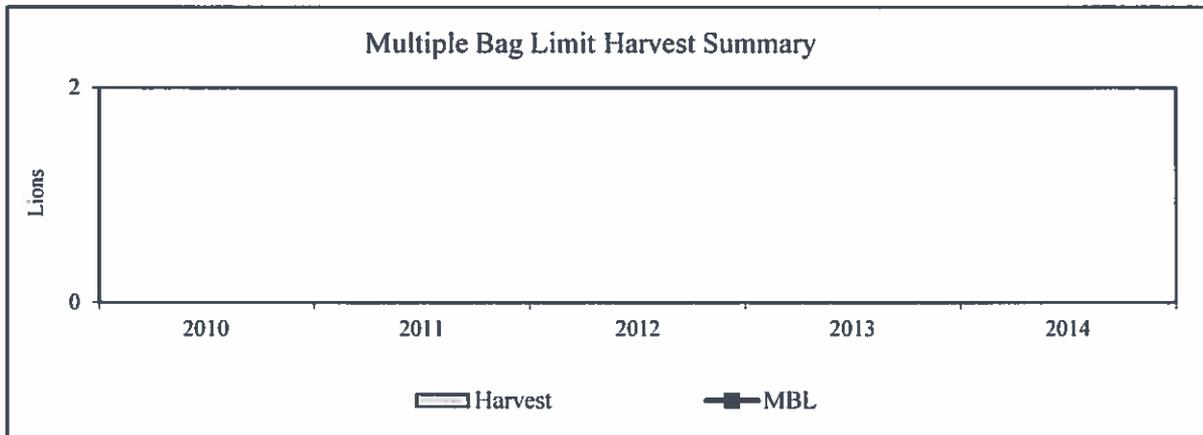
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|-----------------------------|------------|------------|--------------|
| Liberal | July 1, 2015- June 30, 2016 | | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: R. Myers
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges:

Mountain lions are occasionally present in U43B; however, they are not currently believed to be a major contributing factor to sheep mortality. In the summer 2011, a mountain lion was photographed on catchment 534 in close proximity to the Chocolate Mountains. Three additional cameras were deployed at Trigo, Hunts and Hummingbird sheep potholes located in the Trigo Mountains for the Summer and early Fall of 2013 and no lions were photographed at these water developments. During the Fall of 2014, cameras were deployed near deer waters 967 and 966 and no lion were captured. There are planned camera deployments for waters during the summer of 2015 including #536, 535, 534, and 532. to monitor lion presence.

December 2012, a sheep hunter reported a lion caused sheep mortality in the Red Cloud Mine area of U43B. The Department was able to investigate this report. There was not sufficient evidence to conclusively say that a lion was the manner of death or not.

In October 2012, AGFD Research Branch completed a camera study in U43A/B involving 50 game cameras that were placed in 16 mesquite bosque areas of YPG (Cibola and Kofa Range). No lions were photographed in U43B on these cameras.

Additionally, there are several collared sheep in U43A/B whose movements and mortality are being monitored. There were not any reported lion caused mortalities of big horn sheep due to lions in 2014.

Sport

harvest of mountain lions is allowed on YPG; however, season dates and access are restricted by the YPG hunting program (September-February). Additionally, the wildlife manager has not encountered many hunters attempting to harvest lions in U43B. For the last five year period, there have been no reported mountain lion kills in GMU 43B. Mountain hunting in U43B tends to be other hunters who carry a lion tag "in case" they see a lion. There is not a large amount of effort directed towards targeted lion hunting. Lion hunting opportunities in U43B are limited by military access and warmer/dryer habitat conditions.

Regional Notes:

Unit(s): 43B

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:



Wildlife Manager

3/9/15

Date



Sector Supervisor

3-9-15

Date

accepted modified

Comments:



Game Specialist

3-9-15

Date

accepted modified

Comments:



Regional Supervisor

3-9-15

Date

accepted modified

Comments:



Game Branch Chief

3/31/15

Date

accepted modified

Comments:



Executive Staff

4/2/15

Date

accepted modified

Comments:

Unit(s): 44A Species: Mountain Lion

Year: 2015/16

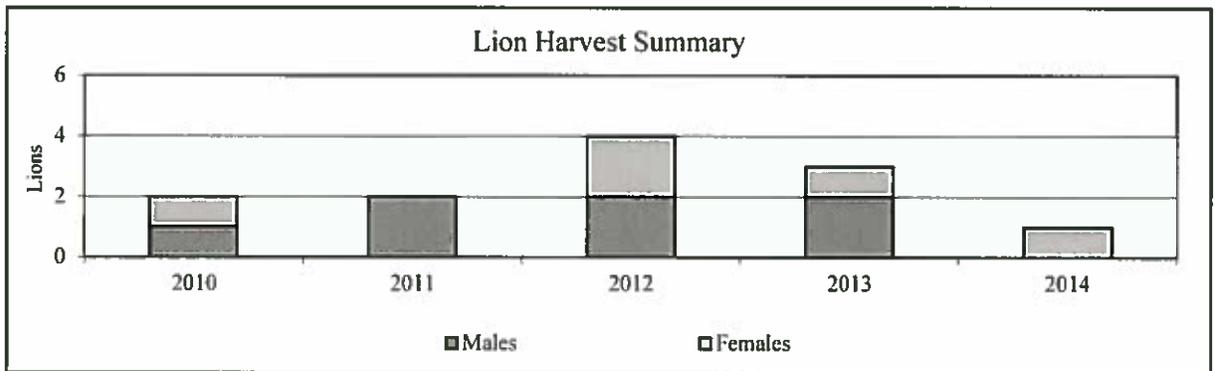
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 1 | 1 | 2 | 0 | 0% | NO |
| 2011 | 2 | 0 | 2 | N/A | #VALUE! | #VALUE! |
| 2012 | 2 | 2 | 4 | 1 | 25% | NO |
| 2013 | 2 | 1 | 3 | | 0% | NO |
| 2014 | | 1 | 1 | | | |
| 2-Year Mean | | | | | 14% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

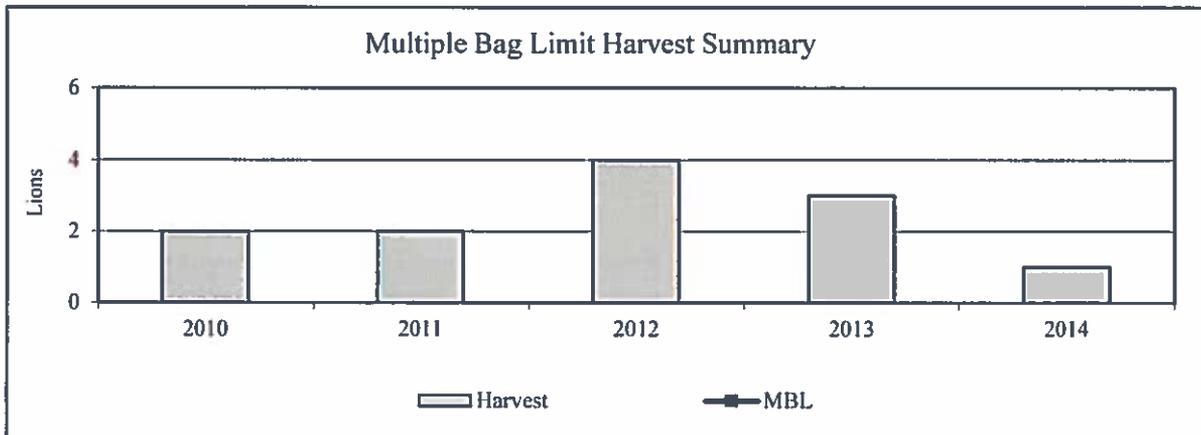
| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Liberal | July 1, 2015 - June 30, 2016 | Unit 44A | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Kohnke, Antolik
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____

44A



Significant Management Issues, Opportunities or Challenges:

Survey Notes/Occurrence Records

-No mountain lions were observed during aerial deer surveys this year.

Seven mountain lions have been captured and collared in unit 44A under the Adaptive Lion Management Plan (ALMP):

RF04 - Collared 3/26/12, currently collared (re-collared 2-22-13)

RF05 - Collared 7/9/12, died of natural causes, about 1-21-13

RM03 - Collared 8/5/12, lethally removed 9/20/12 GMU 42

RF06 - Collared 8/13/12, currently collared (as of 12/31/12), collar not functioning

RM04 - Collared 8/20/12, lethally removed 1-22-13 GMU 42

RF09 - Collared 4/9/13, lethally removed 10-26-14 GMU 44A

RM06 - Collared 4/9/13, currently collared GMU 16A and 44A has killed BHS in 16A. Was recollared in 9/14 and renamed AM03 by Research Branch.

-Population information for mountain lions in this habitat type is scarce and population estimating techniques are limited. One mapping strategy categorized mountain lion habitat using designations of sparse, low and medium habitat. The densities developed for each category were ranges, but the low end of the range seems most realistic in Region IV.

Sparse habitat 0.001 lions per square mile

Low density habitat 0.005 lions per square mile

Medium density habitat 0.01 lions per square mile

GMU 44A contains a total of 2363 square miles of habitat; 400.4 sq mi of sparse mountain lion habitat, 1482 sq mi of low density mountain lion habitat, and 480.3 sq mi of medium density mountain lion habitat resulting in an estimated population of 12.6 mountain lions.

Regional Notes:

The collars are Globalstar satellite GPS collars and report to a website on four hour intervals. A cluster of two to three locations usually means a smaller prey item such as coyote, fawn, or javelina. Larger clusters over several days usually means a full size deer or sheep. Clusters are located as soon as possible after the collared mountain lion leaves. So far we have documented prey items of coyotes, bobcats, gray fox, bovine calf, mule deer fawns, bighorn sheep lamb, mule deer does, mature mule deer bucks, bighorn sheep ram, and bighorn sheep ewes as well as small animals including tortoise, wood peckers, and skunks.

Several

technical difficulties with the collars have been encountered. Several collars have not worked since they were placed on the animal and others work periodically and/or infrequently. Infrequent GPS fixes makes it extremely difficult to identify kill sites. One mountain lion was recollared a third time, another mountain lion was recollared twice. Another issue is not all locations are uploaded to the website, but are only known after the collar is sent back to Northstar. RF09 routinely went over two weeks without a location. Once her BHS ewe predation was located, this time lag made it very difficult and time consuming to locate her in an area suitable for removal following the Adaptive Lion Management Plan (ALMP).

Hunt/Mortality

This unit has been open for the harvest of mountain lion, but only recently has any substantial harvest occurred. In 2012 two mountain lions; one male and one female were sport harvested and RM03 and a 7 year old female were removed through the ALMP. In 2013 another two mountain lions; also one male and one female were sport harvested, and RM04 was lethally removed as part of the ALMP. In 2014, the only harvest was RF04 which was lethally removed as part of ALMP. In the last six years 9 mountain lions were reported as sport harvested in 44A. Four mountain lions have been removed through the ALMP.

Recommendation

44A is recommended for a unit wide daylong season with an annual bag limit of three mountain lions.

44A is included in the Minimal Occurrence Lion Management Zone. Minimal Occurrence Lion Management Zones will be managed for extremely low mountain lion densities. It is hoped that the setting of a multiple bag with a harvest objective greater than one will encourage an increase in the sport take of mountain lions in this area. Multiple bag limit harvest objectives are utilized in specific areas where prey populations are below management objectives and mountain lion predation is implicated as a contributing factor or where translocated populations are being limited by mountain lion predations. Concurrent with the ALMP a temporary reduction in mountain lion numbers in 44A is expected to reduce predation on bighorn sheep and help them to recover to a self-sustaining population level. The current harvest objective should be discontinued or modified as bighorn sheep populations in 44A (Harcuvar, Harquahala, Black and Buckskin) reach their self-sustaining population threshold identified in the ALMP.

Most of the unit is bighorn sheep habitat and has been the location for a number of translocations attempting to establish/enhance bighorn sheep populations. Recently the ALMP was approved with the goal of increasing knowledge of mountain lion predation events and removing offending mountain lions while bighorn sheep populations are below management objectives. From 1994 to 2001, one hundred and eleven desert bighorn sheep have been transplanted into four different locations in the Granite Wash and Harcuvar Mountains. Of these 111 sheep 72 were fitted with VHF radio telemetry collars and were monitored through January of 2006. Mortality signals were located as soon as possible after each telemetry flight. Forty-nine mortalities were indicated but one was not recovered. Of the 48 documented mortalities, 23 were caused by mountain lion, 15 were undetermined but not obvious predation, five were capture related, four had evidence of bad sinusitis, one from falling and one drowned.

In 2000, twenty-five desert bighorn sheep were transplanted into the Harquahala Mountains. Of these 25 sheep, 13 were fitted with VHF radio telemetry collars and were monitored through January of 2006. Mortality signals were located as soon as possible after each telemetry flight. Nine mortalities were documented and three radio collars either malfunctioned or their battery went dead. Of the nine documented mortalities, eight were caused by mountain lion and the other one appeared to be malnutrition.

In 2011, twenty desert bighorn sheep were transplanted to People's Canyon in unit 16A. Soon after the release the sheep moved into the Black Mountains in unit 44A. Of these 20 sheep, nine were fitted with GPS collars and are currently being monitored. Mortality events were investigated as soon as possible and often resulted in observing mountain lions on the fresh carcass. To date, five mortalities have been investigated and all five were caused by mountain lion.

Of these 62 documented desert bighorn sheep mortalities investigated 36 (58%) were caused by mountain lion predation. These predations occurred throughout the habitat from low creosote-paloverde to chaparral-scrub type. Mountain lion predations have occurred in the Harquahalas, Little Harquahalas, Granite Wash, Harcuvar, East Harcuvar/Robson' Block and Black Mountains. Recent research under the ALMP has shown mountain lions moving between the Black, Harcuvar, Granite Wash, Harquahalas, Divide (GMU 42) and Bighorn Mountain (GMU 42) ranges.

In 2013 and 2014 a supplemental transplant of seventy four more desert bighorn sheep were transplanted into People's Canyon in unit 16A. In the last 15 months 10 mortalities have been investigated with 5 being mountain lion predation. Approximately 1/2 the ewes and 3 rams have crossed over and spend time in 44A. Currently there are 2 collared lions in this area of 44A, but apparently none of the 5 documented sheep predations were caused by these two.

Unit(s): 44A

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:

Stuart Kahler 3-9-15
Wildlife Manager Date

David Conrad 3-9-15 accepted modified
Sector Supervisor Date

Comments:

Mark Brown 3-9-15 accepted modified
Game Specialist Date

Comments:

Paul Bauer 3-9-15 accepted modified
Regional Supervisor Date

Comments:

Andy 3/31/15 accepted modified
Game Branch Chief Date

Comments:

John 4/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 44B Species: Mountain Lion

Year: 2015/16

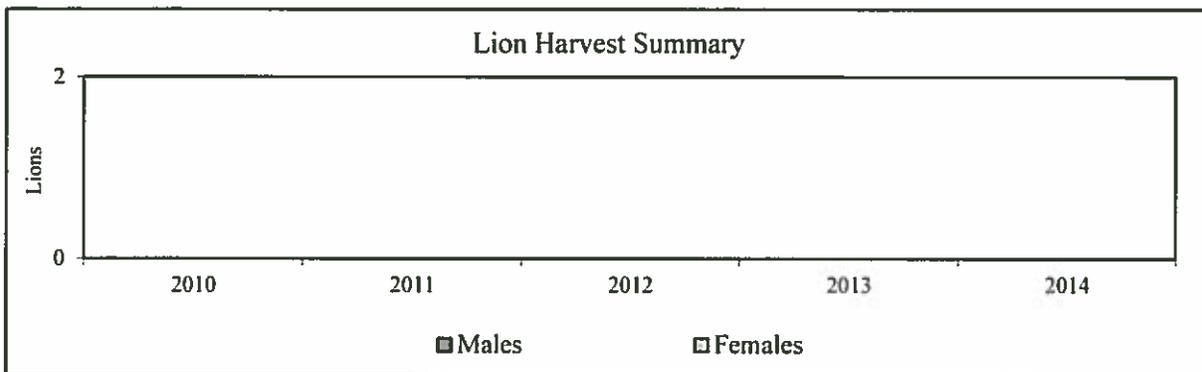
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2012 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2013 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2014 | 0 | 0 | 0 | | | |
| 2-Year Mean | | | | | #DIV/0! | #DIV/0! |

Management Considerations:

#DIV/0!

#DIV/0!



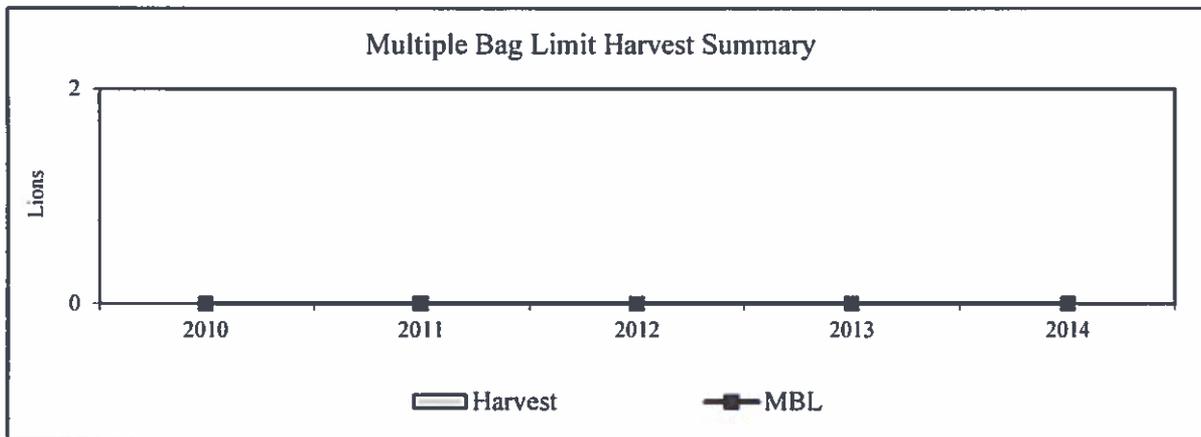
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Liberal | July 1, 2015 - June 30, 2016 | 44B | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: D. PFLEGER
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges:

There has been no reported sport harvest of Mountain Lion in unit 44B in the past 5 years. Also of note, a local sheep guide placed trail cameras at all of the major water sources in the Plomosas Mountains during the past two summers. During that time there was no documentation of lions at any of the water developments. AZGFDs continued work with collared lions in adjacent units still has not show much if any use of the available habitat in 44B.

Regional Notes:

Unit 44B is part of the Adaptive Lion Management Plan (ALMP) and efforts by Department staff are currently underway to monitor lion activity.

Unsubstantiated reports from residents in the communities of Bouse, Parker, Brenda and Quartzsite occur 2-3 times per year.

Recommendation: Liberal Season, (No Change)

Unit(s): 44B

Species: Mountain Lion

Year: 2015

Hunt Recommendation Submitted by:

Deanna J. Plegue 3-9-15
Wildlife Manager Date

David Conrad 3-9-15 accepted modified
Sector Supervisor Date

Comments:

Mark Brown 3-9-15 accepted modified
Game Specialist Date

Comments:

David Baul 3-9-15 accepted modified
Regional Supervisor Date

Comments:

Chris Kelly 3/31/15 accepted modified
Game Branch Chief Date

Comments:

Jen 4/22/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 28

Species: Mountain Lion

Year: 2014/15

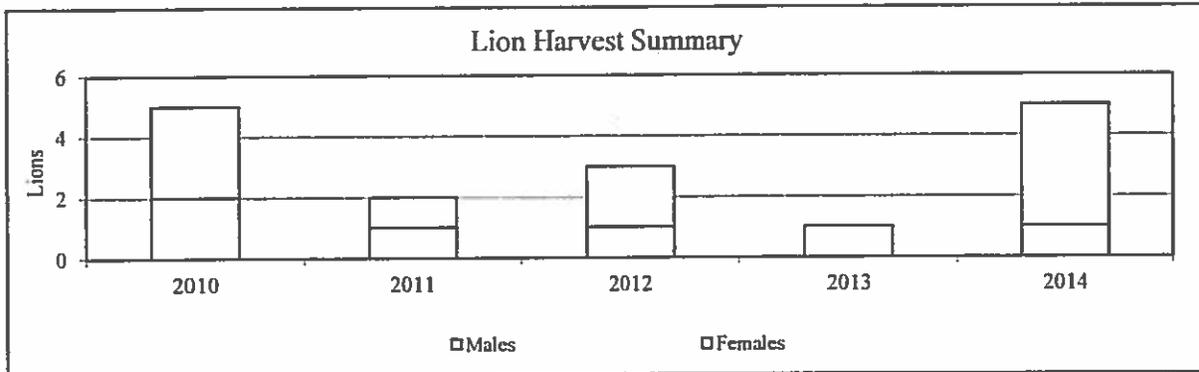
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 2 | 3 | 5 | 0 | 0% | NO |
| 2011 | 1 | 1 | 2 | 0 | 0% | NO |
| 2012 | 1 | 2 | 3 | 0 | 0% | NO |
| 2013 | 0 | 1 | 1 | 0 | 0% | NO |
| 2014 | 1 | 4 | 5 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



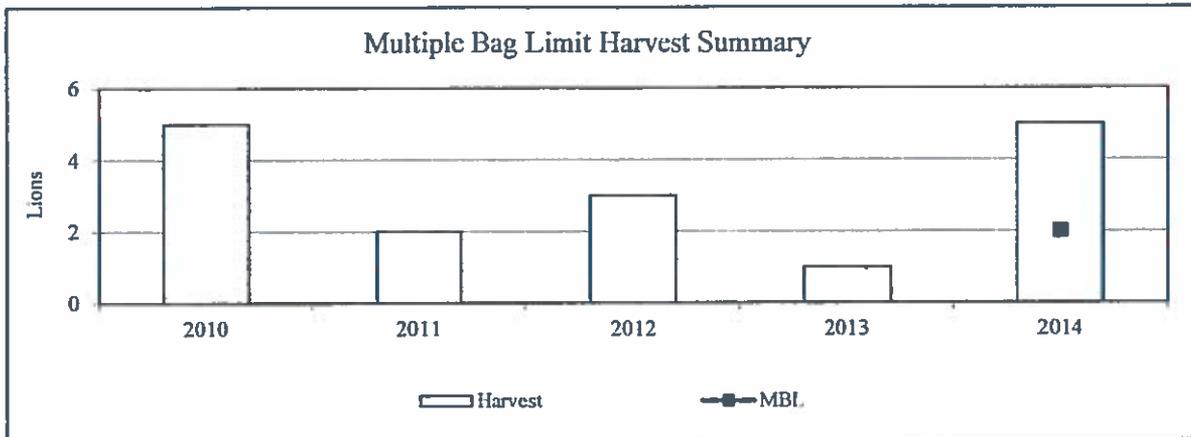
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|------------------------------|-----------------------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | | None | None |
| Multiple Bag Limit (MBL) | July 1, 2015 - June 30, 2016 | Unit 28 South of Highway 70 | 8 | None |
| | | | | |
| | | | | |

Submitted by: Matt Pelto
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges:

The area proposed for the multiple bag limit is the southeastern corner of Unit 28. This area is home to a small population of desert bighorn sheep that was transplanted in 1986 and is currently estimated to be about 51 animals. The sheep population grew to a high population of 64-96 animals during the years 1992-1994 and the sheep numbers have decreased since then. Most of the sheep are found in or near the Peloncillo Wilderness Area.

There has been a multiple bag limit for lions in this area in the past with the MBL target being 8 lions one year. I believe the desert bighorn sheep population would benefit from the re-introduction of the multiple bag limit.

An example of the number of lions in the area can be found through depredation reports. Unit 28 had 1 sport harvest and 13 depredation harvest lions during 2013. These harvest numbers are below the 5-year average of 4 for sport harvest and above the 10-year average of 11 depredation harvested lions. In 2013 only one unit (Unit 31 with 14) had a higher depredation harvest than Unit 28. The depredation harvest in Unit 28 suggests that there is additional opportunity for sport harvest. In 2014 there was an increase in sport harvest to 5 lions and depredation harvest decreased to 6 lions.

In 2012 two trail cameras were set up in this area in an attempt to capture data on desert bighorn sheep. One of these cameras has captured photos of several lions in sheep habitat. The 2012 sheep hunter reporting seeing a lion on Orange Butte and reported getting several trail camera pictures of a lion in Midway Canyon. All of these reports and trail camera photos have come from the relatively small area surrounding the desert bighorn sheep population.

It is my recommendation that a multiple bag limit for mountain lion be continued in Unit 28 south of highway 70 with a MBL target of 8 Mtn Lions. The MBL hunt will be in addition to the standard Mtn Lion hunt in the remainder of Unit 28.

The MBL will not be continued indefinitely, it is seen as a temporary management action to increase the bighorn sheep population. However, we do envision keeping the structure in place for a minimum of 3 years (through the 2016 bighorn sheep survey) to properly assess the effectiveness of the recommended MBL structure. The following management objectives will then be evaluated:

- 1) A measureable increase in observed total population numbers of Desert Bighorn Sheep, and/or
- 2) A measureable increase in observed lamb:ewe ratio, and/or
- 3) A measureable increase in lion removals occurring within Desert Bighorn Sheep occupied habitat.

If the above management objectives are not met after this MBL has been in place for a minimum of 3 years, then the MBL will be discontinued.

Unit(s): 25 Species: MTN LION

Year: 2014/15

Hunt Recommendation Submitted by:



Wildlife Manager 3/10/15
Date



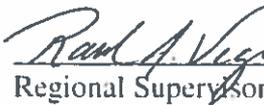
Sector Supervisor 3/10/15 accepted modified
Date

Comments:



Game Specialist 3/10/15 accepted modified
Date

Comments:



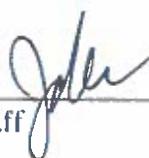
Regional Supervisor 3-10-15 accepted modified
Date

Comments:



Game Branch Chief 3/24/15 accepted modified
Date

Comments:



Executive Staff 4/22/15 accepted modified
Date

Comments:

Unit(s): 29/30A

Species: Mountain Lion

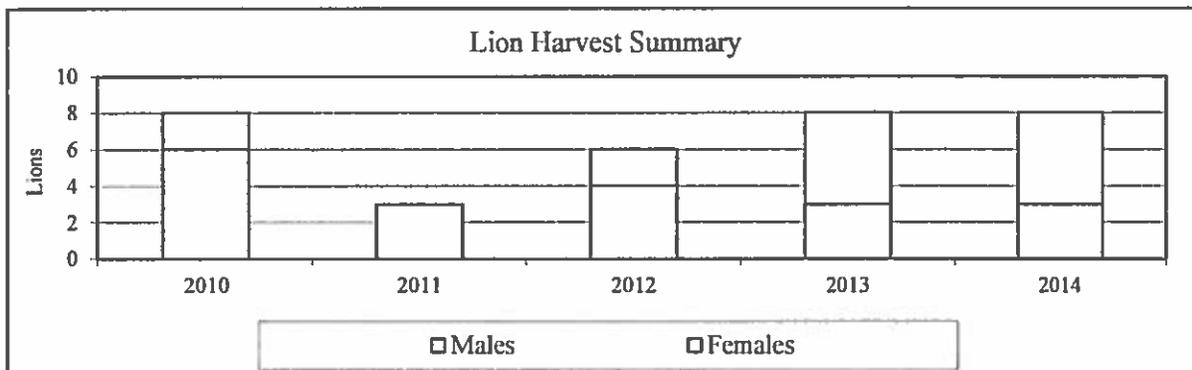
Year: 2015/2016

Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (>3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 6 | 2 | 8 | 1 | 13% | NO |
| 2011 | 3 | 0 | 3 | 0 | 0% | NO |
| 2012 | 4 | 2 | 6 | 1 | 17% | NO |
| 2013 | 3 | 5 | 8 | 3 | 38% | YES |
| 2014 | 3 | 5 | 8 | | | |
| 2-Year Mean | | | | | 27% | NO |

Management Considerations:

- *Continue Single Unit Management
- *No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|---|----------------------|------------|--------------|
| Standard | August 20, 2010 - May 19, 2011 July 1, 2015 - | Unit 29/30A-Unitwide | None | None |
| | June 30, 2016 | | | |
| | | | | |
| | | | | |

Submitted by: G.R.GONZALES
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____

Date: _____

Unit(s): 29/30A

Species: Mountain Lion

Year: 2015/2016

Management Notes:

**Please provide explanation and justification for recommendations outside of guidelines.*

**This section may be used to document management information that may be instructive to future wildlife managers.*

**This section may vary by region; some regions may have other required information for this section.*

Unit(s): 29 Species: MT. LION

Year: 2014/15

Hunt Recommendation Submitted by:

[Signature] 3/10/15
Wildlife Manager Date

[Signature] 3/10/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/10/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-10-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/24/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 31/32

Species: Mountain Lion

Year: 2014/15

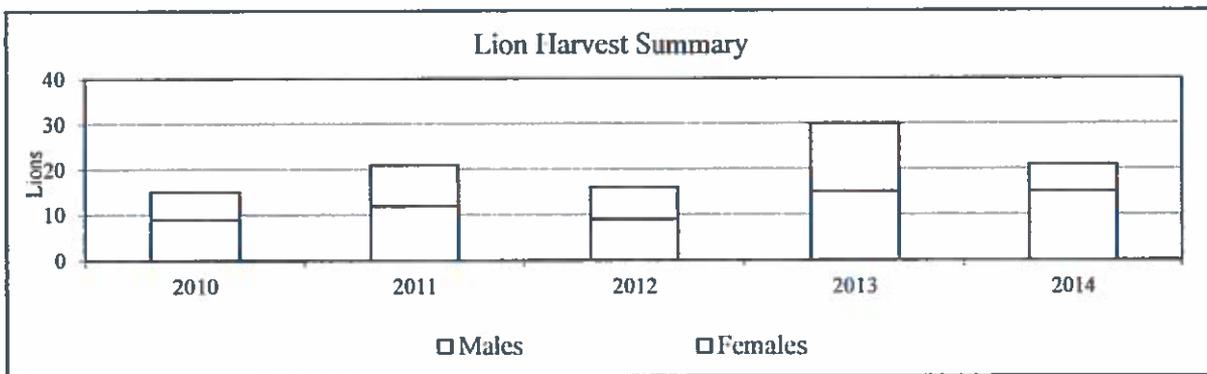
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 9 | 6 | 15 | 3 | 20% | NO |
| 2011 | 12 | 9 | 21 | 6 | 29% | NO |
| 2012 | 9 | 7 | 16 | 4 | 25% | NO |
| 2013 | 15 | 15 | 30 | 7 | 23% | NO |
| 2014 | 15 | 6 | 21 | | | |
| 2-Year Mean | | | | | 24% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



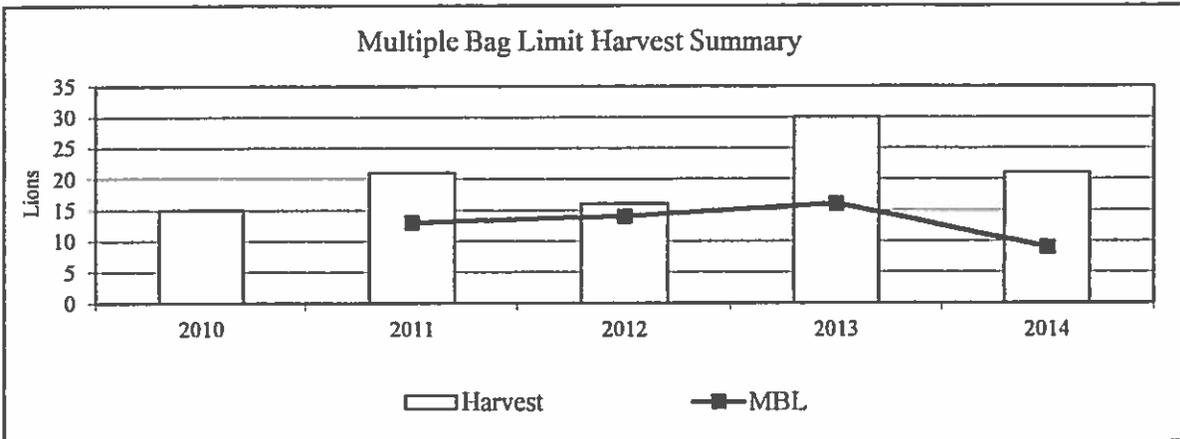
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|---------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | GMU 31 and 32 | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: J. Bacorn
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



GMU 31-32 Mountain Lion-Significant Management Issues:

Mountain Lion Removals

There were 21 lions recorded as sport harvests in GMU 31-32 in 2014, similar to the 5 and 10 year averages (Figure 1). Lions are also removed from GMU 31-32 under depredation laws authorized through ARS 17-302. From 2003-2007, 34% of the statewide depredation lions occurred in GMU 31-32 (Mountain Lion and Bear Conservation Strategies Report). In 2014, 17 depredation lions were removed from GMU 31-32. This is a little less than the 5-year and 10-year averages (Figure 1).

A combined sport harvest and depredation of 38 lions were removed from GMU 31-32 in 2014, this is between the 5-year and 10-year averages. Note the sport harvest and depredation removal appear to have had an inverse relationship from 2006-2012 (Figure 2).

Mountain Lion Densities

Based upon the Department's 2002 Statewide Mountain Lion habitat assessment, GMU 31-32 has approximately 2745 square miles of lion habitat. Within that habitat there are low, medium and high lion densities associated with different habitat types. The estimated lion population for GMU 31-32 based upon the extremes of estimated density for lions ranges from 70-165 lions (average = 118).

Multiple Bag Limit Structures

Multiple bag limit (MBL) hunt structures for mountain lions were first established in AZ in 1999. As listed in the AGFD Hunt Guidelines the MBL structure "may be offered in hunt units or a portion of a hunt unit to increase lion hunting opportunity. These should be designed to assist in achieving population objectives for another wildlife species. When targets have been achieved for which multiple bag limits were established, the multiple bag limit hunt structure should be removed from that unit". The MBL is also listed as an alternative lion harvest structure "that may be used in those units where prey populations are below management objectives and mountain lion predation is implicated as a contributing factor or where a translocation is being limited by mountain lion predation".

Unit(s): 31/32

Species: Mountain Lion

Year: 2014/15

In 2011, the AGFD Commission established a mountain lion MBL in GMU 31-32 in an attempt to improve the desert bighorn sheep (DBS) population. Initially the MBL included the entire area of both GMU 31 and 32. In 2012, the AGFD Commission restricted the lion MBL Area to the northern portions of GMU 31 and 32 which includes the Aravaipa Canyon drainage and the Galiuro and Santa Teresa Mountains. The GMU 31-32 MBL was discontinued as of July 1, 2014.

MBL Results

The GMU 31/32 MBL was established at 20 lions. The MBL season was from July 1 through June 30 instead of the calendar year, therefore within a calendar year, there could be two MBL seasons. The 2011-12 MBL of 20 lions was obtained in late January of 2012, the 2012-13 MBL was obtained in late June of 2013 and the 2013-14 MBL was not obtained. On a calendar year basis and within the MBL, 13 mountain lions were taken in 2011, 14 in 2012, 16 in 2013 and 9 during the first six months of 2014.

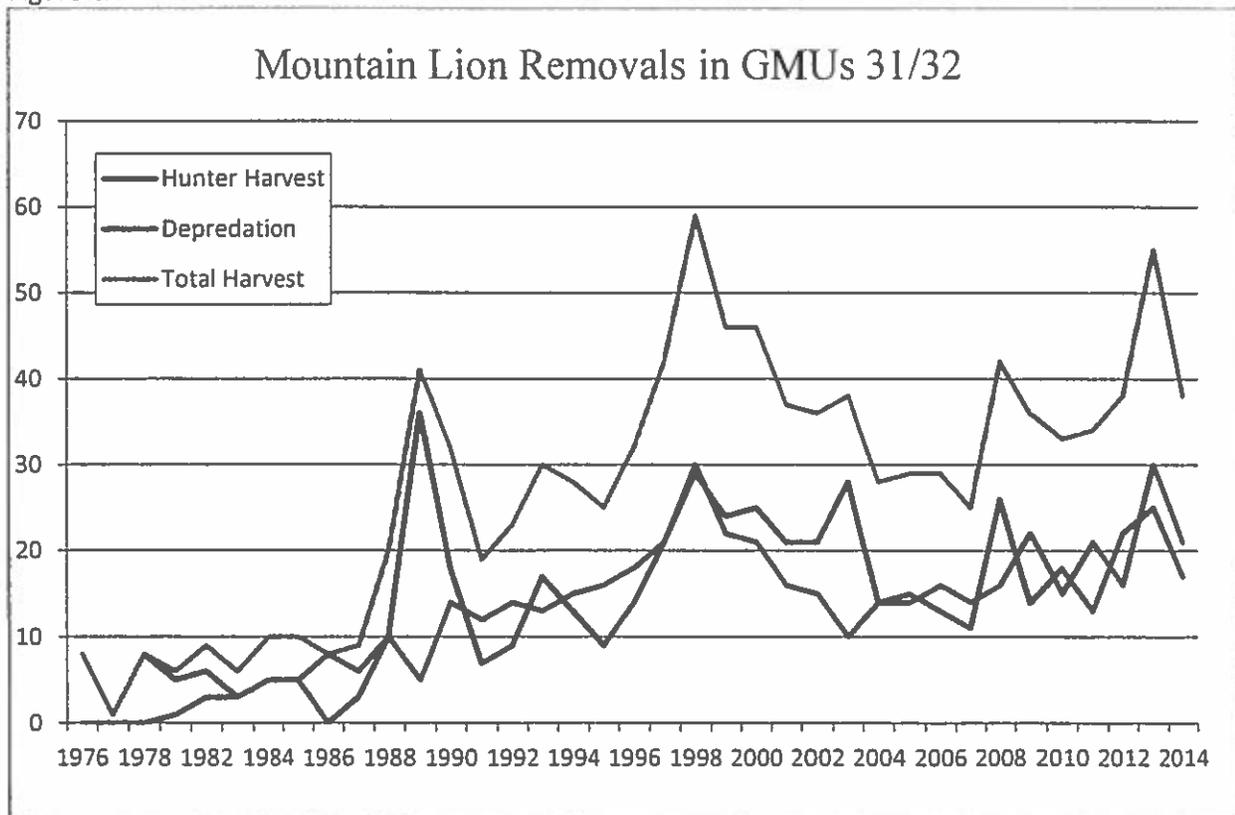
Recommendation

The mountain lion recommendation for 2015-16 is for no change to the hunt structure and to not reinstate the mountain lion MBL.

Figure 1.

| Mountain Lion Sport Harvest and Depredation GMU 31-32 | | | | | | | | |
|---|----------|----------------|----------|----------------|-------------|--------------|-------------|-----------|
| YEAR | SPORT 31 | DEPREDATION 31 | SPORT 32 | DEPREDATION 32 | SPORT 31/32 | DEPRED 31/32 | Total 31/32 | 31/32 MBL |
| 1997 | 6 | 11 | 15 | 10 | 21 | 21 | 42 | |
| 1998 | 6 | 23 | 24 | 6 | 30 | 29 | 59 | |
| 1999 | 9 | 20 | 13 | 4 | 22 | 24 | 46 | |
| 2000 | 11 | 9 | 10 | 16 | 21 | 25 | 46 | |
| 2001 | 4 | 13 | 12 | 8 | 16 | 21 | 37 | |
| 2002 | 8 | 12 | 7 | 9 | 15 | 21 | 36 | |
| 2003 | 5 | 18 | 5 | 10 | 10 | 28 | 38 | |
| 2004 | 8 | 9 | 6 | 5 | 14 | 14 | 28 | |
| 2005 | 8 | 11 | 6 | 4 | 14 | 15 | 29 | |
| 2006 | 4 | 4 | 12 | 9 | 16 | 13 | 29 | |
| 2007 | 4 | 7 | 11 | 4 | 15 | 11 | 26 | |
| 2008 | 3 | 13 | 13 | 13 | 16 | 26 | 42 | |
| 2009 | 7 | 6 | 15 | 8 | 22 | 14 | 36 | |
| 2010 | 3 | 7 | 12 | 11 | 15 | 18 | 33 | |
| 2011 | 6 | 5 | 15 | 9 | 21 | 14 | 35 | 13 |
| 2012 | 5 | 13 | 11 | 9 | 16 | 22 | 38 | 14 |
| 2013 | 7 | 14 | 23 | 11 | 30 | 25 | 55 | 16 |
| 2014 | 4 | 8 | 17 | 9 | 21 | 17 | 38 | 9 |
| 5 yr ave | 5 | 9 | 16 | 10 | 21 | 19 | 40 | |
| 10 yr Ave | 5 | 9 | 12 | 9 | 19 | 18 | 36 | |
| Total | 104 | 195 | 210 | 146 | 335 | 358 | 693 | 52 |

Figure 2.



Unit(s): 31/32 Species: MOUNTAIN LION

Year: 2014/15

Hunt Recommendation Submitted by:

John Bacon 3/10/2015
Wildlife Manager Date

Duane J. Curbishon 3/10/15 accepted modified
Sector Supervisor Date

Comments:

Joe Heller 3/10/15 accepted modified
Game Specialist Date

Comments:

Rand J. Vee 3-10-15 accepted modified
Regional Supervisor Date

Comments:

Chris Kelly 3/24/15 accepted modified
Game Branch Chief Date

Comments:

John 4/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 33

Species: Mountain Lion

Year: 2014

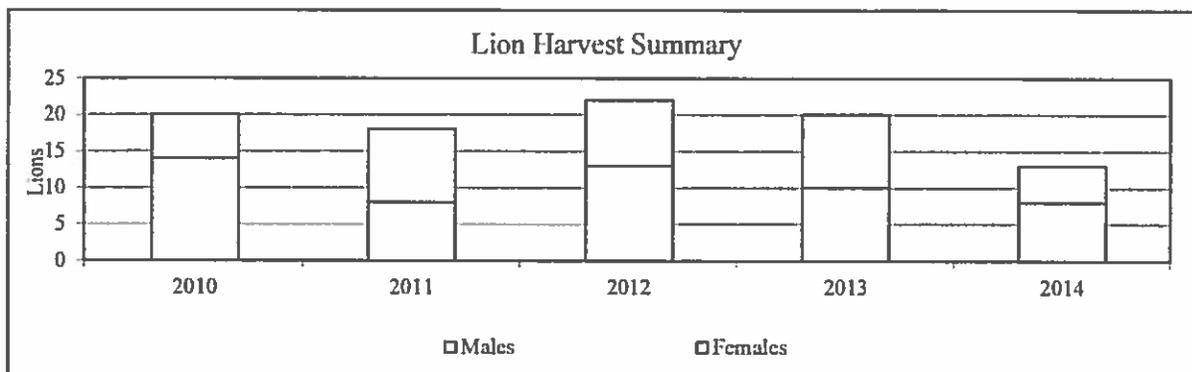
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 14 | 6 | 20 | 4.2 | 21% | NO |
| 2011 | 8 | 10 | 18 | 5.6 | 31% | NO |
| 2012 | 13 | 9 | 22 | 0 | 0% | NO |
| 2013 | 10 | 10 | 20 | 0 | 0% | NO |
| 2014 | 8 | 5 | 13 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|---|------------|--------------|
| Standard | July 1, 2014 - June 30, 2015 | Unit 33 including Pusch Ridge Hunt Area | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: J. McGehee, M. Guerena
Wildlife Managers

Amendments & Notes:

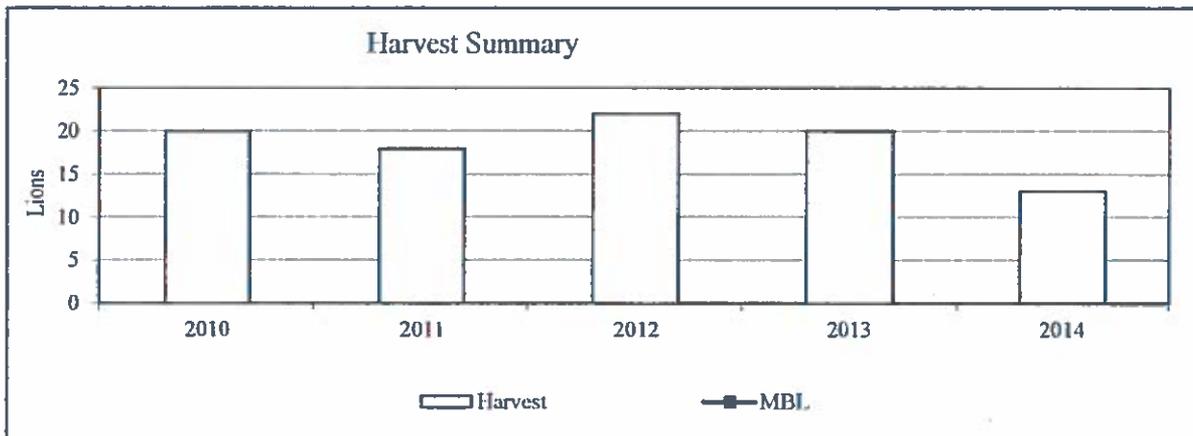
Game Branch Approval: _____

Date: _____

Unit(s): 33

Species: Mountain Lion

Year: 2014



Mountain lion harvest has remained statistically constant over the past five years with a five year average of 19 mountain lions being harvested from Unit 33 per year. This year there were 13 mountain lions harvested. The average still remains at 19 even with this lower than average harvest. It is still believed there is a robust and healthy lion population. A lower harvest can likely be attributed to fewer houndsmen hunting 33. Houndsman take dropped from 12 lions in 2013 to 7 in 2014. This would account for the lower 2014 harvest.

In the fall of 2013, 31 bighorn sheep were reintroduced to the Santa Catalina Mountains in Northern Game Management Unit (GMU) 33. 30 of the 31 bighorn sheep were equipped with GPS collars providing real time information. The addition of a Restrictive Hunt prohibiting the take of mountain lions with the aid of dogs in the Pusch Ridge Hunt Area (PRHA) of Northern GMU 33 was added in the 2013-14 hunt regulations. This was created to be consistent with the Federal dog restrictions put in place to protect the bighorn sheep during the lambing season. This restriction has remained in place after the additional 2014 supplemental bighorn sheep release to the Pusch Ridge population.

In 2013-14 lion predations were much higher than anticipated on the reintroduced bighorn sheep. Removal of the predating lions on bighorn sheep has been difficult on this project. Over 1/3 of the initial bighorn sheep population was lost to mountain lion predation. It is recommended that the Restrictive Hunt prohibiting the take of mountain lions with the aid of dogs in the PRHA be removed to allow hunters the opportunity to hunt in the PRHA with dogs if they choose. However, the Department is waiting on the advisory committee on how to proceed in this. The Department will likely enact on the committee's recommendation.

Unit(s): 33 Species: Mountain Lion

Year: 2014/15

Hunt Recommendation Submitted by:

Martin Guerrero 3/10/15
Wildlife Manager Date

Martin Guerrero 3/10/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/10/15 accepted modified
Game Specialist Date

Comments:

Raul A Vega 3-18-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/24/15 accepted modified
Game Branch Chief Date

Comments: No change from 2014. Maintaining the restricted season in U33-Puech Ridge Hunt area.

[Signature] 4/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 20B

Species: Mountain Lion

Year: 2014/15

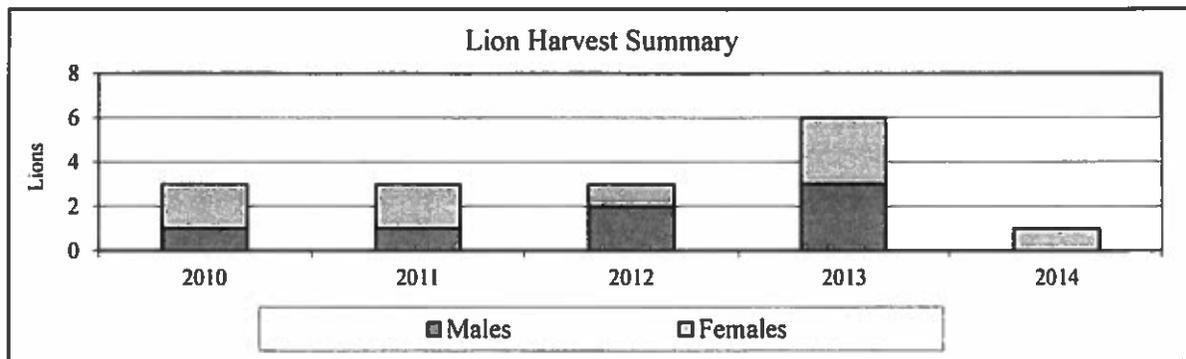
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (>3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 1 | 2 | 3 | 1 | 33% | NO |
| 2011 | 1 | 2 | 3 | 1 | 33% | NO |
| 2012 | 2 | 1 | 3 | 1 | 33% | NO |
| 2013 | 3 | 3 | 6 | 2 | 33% | NO |
| 2014 | 0 | 1 | 1 | | | |
| 2-Year Mean | | | | | 33% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|---------------------------|---------------------|------------|--------------|
| Standard | July 1 2015- June 30 2016 | Unit 20B - Unitwide | None | None |
| | | | | |
| | | | | |

Submitted by: R. BABEL
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____

Date: _____

Unit(s): 20B

Species: Mountain Lion

Management Notes:

Mountain Lion Recommendation – Unit 20B

Submitted by: R. Babel

Open Season Dates: July 1, 2015 – June 30, 2016

Open Areas: Unit wide

Legal Animal: Any Mountain Lion except spotted kittens or females accompanied by spotted kittens.

Number of Permits: Unlimited

Change from last year: None

Notes:

* One mountain lion was reported by sport harvest in 2014. The harvest comprised of 1 female lion.

*2014 Age data not available at time of hunt recommendation.

Unit(s): 20B

Species: Mountain Lion

Year: 2014/15

Management Notes:

| Year | Sex | Cementum Age | Estimated Age |
|------|-----|--------------|---------------|
| 2014 | F | - | - |
| 2013 | M | 10 | 10 |
| 2013 | M | 3 | 4 |
| 2013 | M | 5 | 5 |
| 2013 | F | 4 | - |
| 2013 | F | - | 3 |
| 2013 | F | - | - |
| 2012 | F | - | 1 |
| 2012 | M | - | 4 |
| 2012 | M | - | 6 |
| 2011 | F | 4 | 3 |
| 2011 | M | - | - |
| 2011 | F | 6 | 7 |
| 2010 | M | 3 | 4 |
| 2010 | F | 5 | 7 |
| 2010 | F | - | 3 |
| 2009 | M | - | 1 |
| 2009 | M | - | 1 |
| 2008 | M | 6 | 6 |
| 2008 | M | - | - |
| 2008 | M | - | - |
| 2007 | F | 8 | 8 |
| 2007 | F | - | 1 |
| 2007 | M | 4 | - |
| 2007 | F | 1 | 3 |
| 2007 | M | - | 1 |
| 2007 | F | 4 | - |

Unit(s): 20B Species: M. Lion

Year: 2015/16

Hunt Recommendation Submitted by:

[Signature]
Wildlife Manager 3-5-15
Date

[Signature] 3/5/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/5/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-4-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/24/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/20/16 accepted modified
Executive Staff Date

Comments:

Unit(s): 21

Species: Mountain Lion

Year: 2015/16

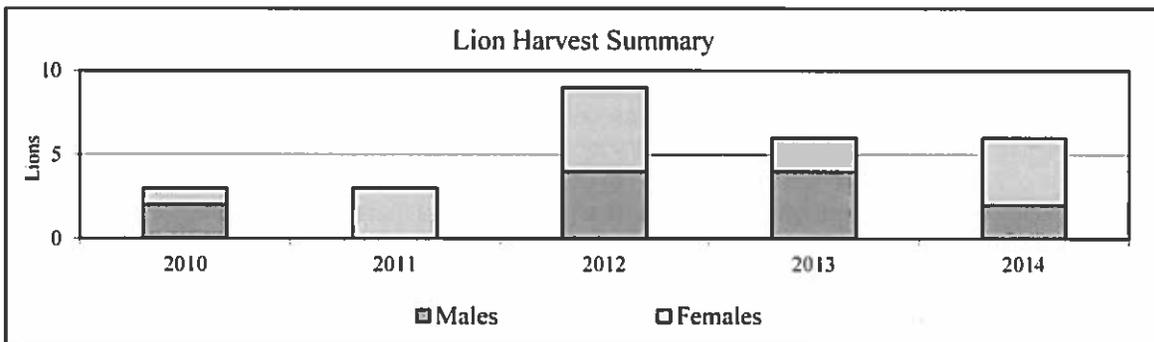
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 2 | 1 | 3 | 1 | 33% | NO |
| 2011 | 0 | 3 | 3 | 1 | 33% | NO |
| 2012 | 4 | 5 | 9 | 1 | 11% | NO |
| 2013 | 4 | 2 | 6 | 1 | 17% | NO |
| 2014 | 2 | 4 | 6 | | | |
| 2-Year Mean | | | | | 13% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|-------------------------------|------------|------------|--------------|
| | | | None | None |
| Multiple Bag Limit (MBL) | July 1, 2015 to June 30, 2016 | GMU 21 | 12 | None |
| | | | | |
| | | | | |

Submitted by: Kyle Cooper
Wildlife Manager(s)

Amendments & Notes:

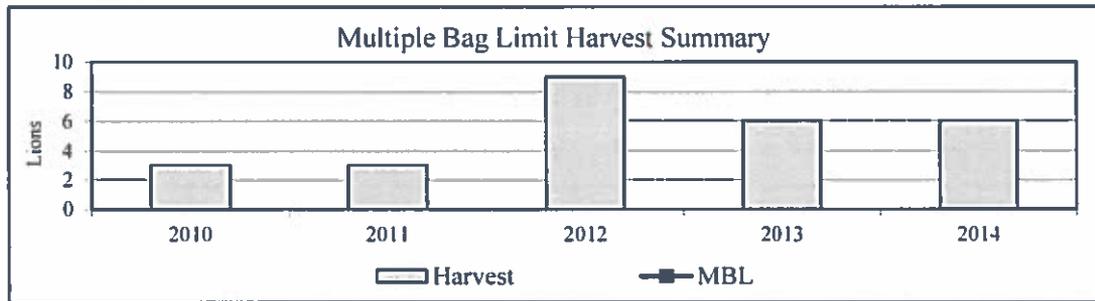
Game Branch Approval: _____

Date: _____

Unit(s): 21

Species: Mountain Lion

Year: 2015/16



Significant Management Issues, Opportunities or Challenges:

Overall, the mountain lion population in Unit 21 is healthy. The Unit 21 mule deer population is improving. As the mountain lions prey base increases it is expected that the mountain lion population is also likely to increase. Unit 21 is currently part of a program to increase the mule deer population. Some of the projects include habitat improvements and water developments. Another factor limiting Unit 21 mule deer from increasing is predation. This year the Department will be conducting aerial coyote gunning. Speaking with several of those who hunt lions with dogs, they choose not to harvest female lions or young lions. The reason being, they do not want their hunting season to be over from tagging a female or young cat. So quite often they do not fill their tag. Plus they want to be able to run their dogs throughout the entire season. If we open Unit 21 to a Multiple Bag Unit, I would expect harvest rates to increase therefore reducing predation on mule deer.

I am requesting Unit 21 become a Multiple Bag Unit with a max of 12 lions harvested. At that point, the hunt structure returns back to a normal hunt unit until the next hunt season.

The mountain lion MBL is recommended for Unit 21 for multiple reasons with the first two being primary goals and the last two being ancillary benefits to the addition of a MBL. They are: 1) to assist and enhance the fawn to doe ratios and increase the overall population of Pronghorn; 2) to assist and enhance the fawn to doe ratios and increase the overall population of mule deer in association with the Wildlife Habitat Enhancement Initiative (WHEI); 3) to reduce lion depredation on livestock; 4) increase hunter opportunity and harvest as determined through anecdotal conversations and contacts of hunters that are not maximizing opportunity of take/harvest due to releasing females in efforts of taking a mature male.

The Unit 21 mountain lion MBL will follow prescriptions and opportunities as outlined in the Unit 21 Predation Management Plan.

MEASUREABLE OBJECTIVES

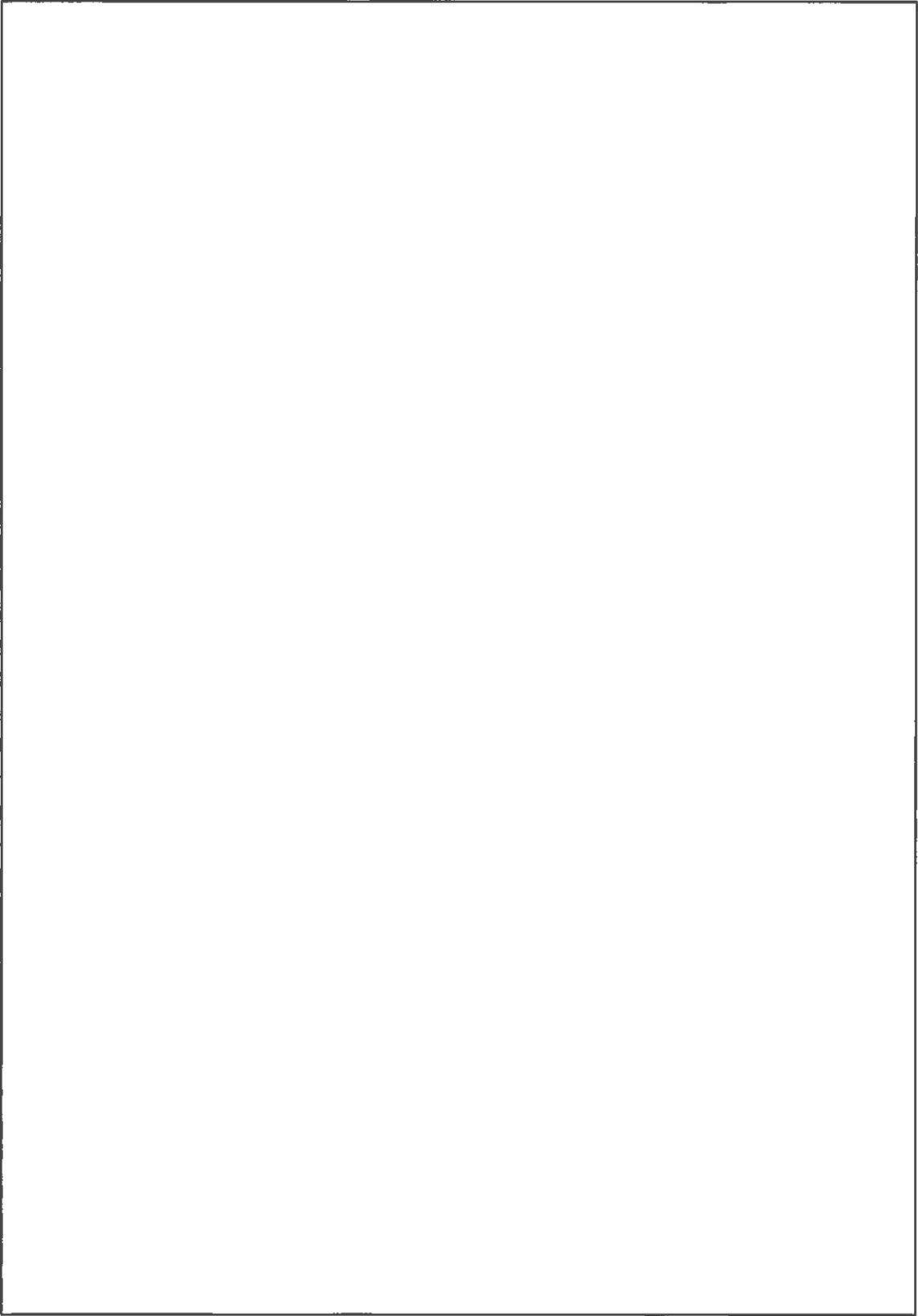
*The MBL will be discontinued in Unit 21 as described in the Unit 21 Predation Management Plan and will include: 1) once fawn to doe ratios for pronghorn and mule deer maintain 3 year trend data as outlined in the Hunt Guidelines prescriptions; 2) after a period of 3 years following the completion of the Unit 21 WHEI Mule Deer Initiative projects; and 3) after a determination has been made that continued use of the MBL is not beneficial or necessary for the enhancement of Pronghorn and mule deer within the project area.

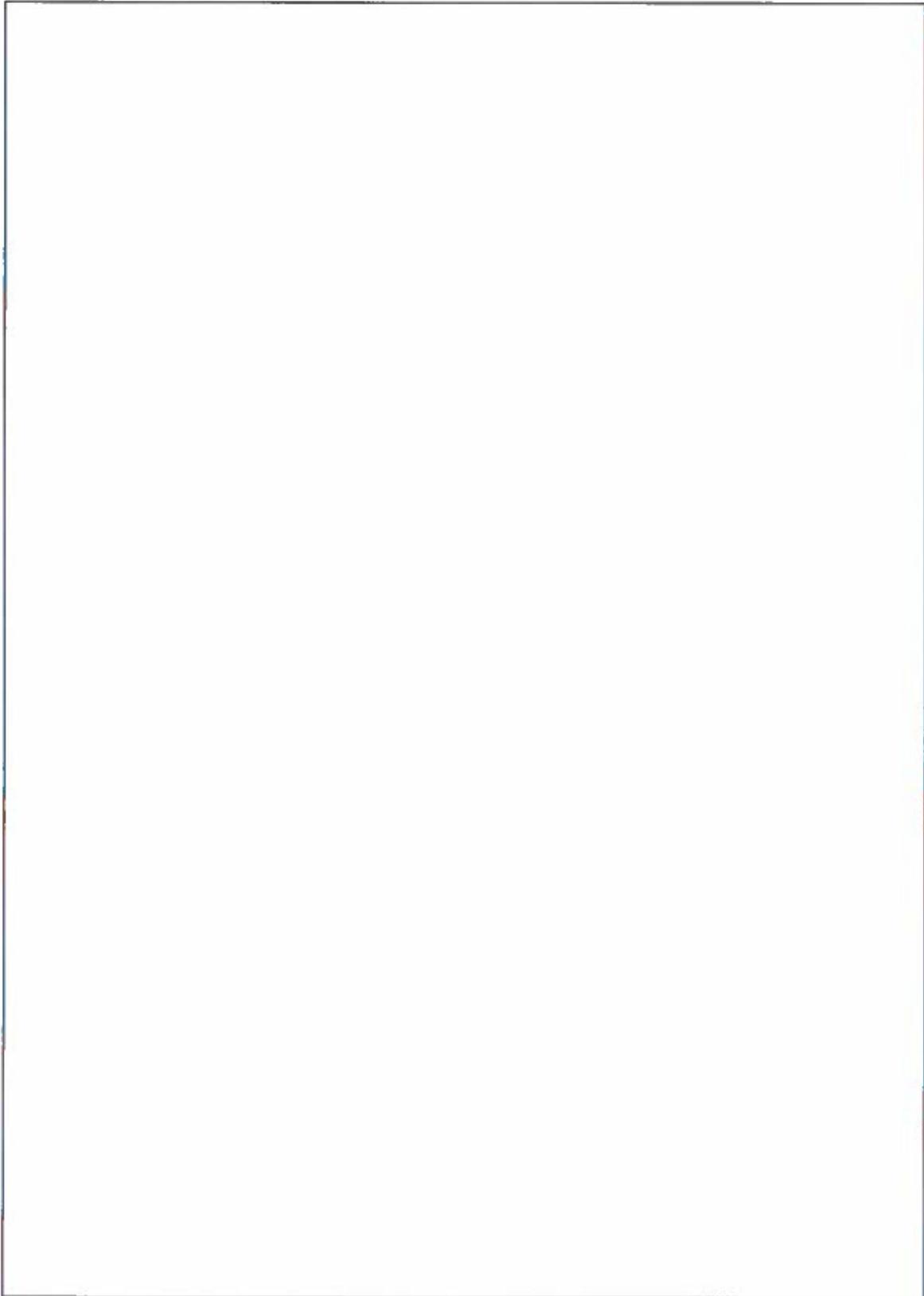
*Once the MBL is discontinued when viable populations of Pronghorn and mule deer become established within goals and objectives, the MBL may be reinstated at a later date if population levels of either Pronghorn or mule deer decrease to a level determined to be detrimental to maintaining viable population levels; or if doe to fawn ratios fall below established limits established within Hunt Guidelines; or if the additional triggers are determined through the Unit 21 Predation Management Plan.

Unit(s): 21

Species: Mountain Lion

Year: 2015/16





Unit(s): 21 Species: MT Lion

Year: 2015/16

Hunt Recommendation Submitted by:

Kyle Cooper 3/5/15
Wildlife Manager Date

Peter Lee 3/5/15 accepted modified
Sector Supervisor Date

Comments:

Dustin Owen 3/5/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-4-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/24/15 accepted modified
Game Branch Chief Date

Comments: adding to the MBL - U21 Production Mgmt Plan

[Signature] 3/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 22

Species: Mountain Lion

Year: 2014/15

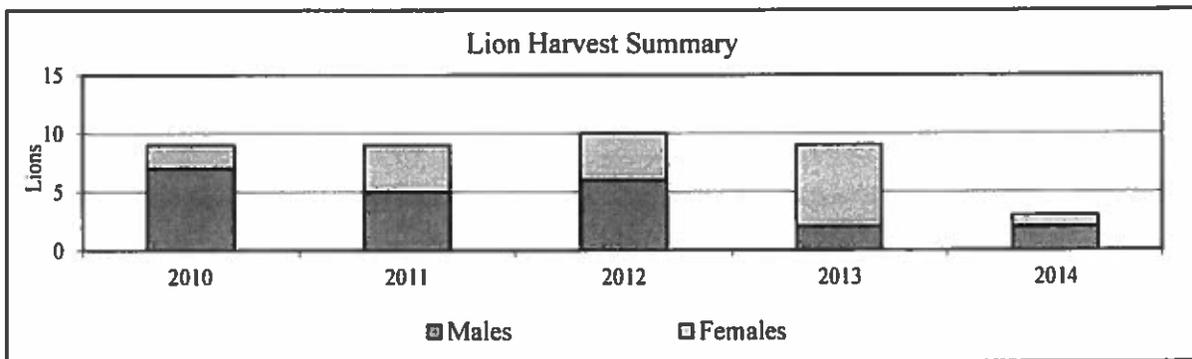
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 7 | 2 | 9 | 1 | 11% | NO |
| 2011 | 5 | 4 | 9 | 2 | 22% | NO |
| 2012 | 6 | 4 | 10 | 1 | 10% | NO |
| 2013 | 2 | 7 | 9 | 2 | 22% | NO |
| 2014 | 2 | 1 | 3 | | | |
| 2-Year Mean | | | | | 16% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



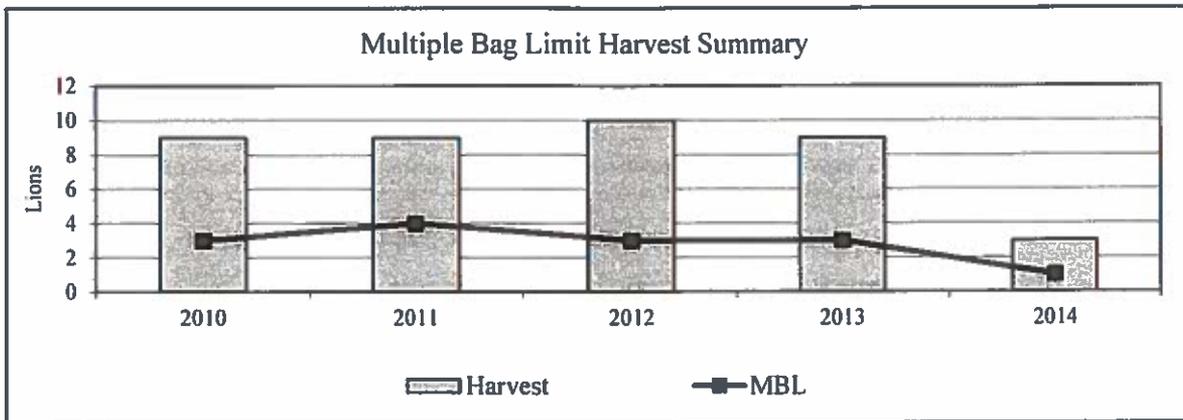
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|------------------------------|---|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | Unit 22 | None | None |
| Multiple Bag Limit (MBL) | July 1, 2015 - June 30, 2016 | 22S (South of Hwy 87 and FR 143, West of Hwy 188) | 12 | None |
| | | | | |
| | | | | |

Submitted by: John Dickson
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges:

*The portion of Unit 22 South of Hwy 87 and Forest Road 143, West of Hwy 188, will continue to be managed with the Multiple Bag Limit.

Regional Notes:

A total of 3 lions (2 male and 1 female) were harvested from Unit 22. Calculated adult female harvest is less than 35% of total harvest and is within guidelines.

The mountain lion population in Unit 22 appears to be stable and healthy from the harvest information, therefore I recommend no change from the current standard hunt structure.

Unit(s): 22 Species: M. Lin

Year: 2015/16

Hunt Recommendation Submitted by:

John Dick 3/26/15
Wildlife Manager Date

[Signature] 3/5/15 accepted modified
Sector Supervisor Date

Comments:

Dustin Downen 3/5/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-4-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/31/15 accepted modified
Game Branch Chief Date

Comments: Removed Unit 22 south from the MBL structure.
Triggers met a few years ago.

[Signature] 4/20/15 accepted modified
Executive Staff Date

Comments:

Unit(s): 23

Species: Mountain Lion

Year: 2015/16

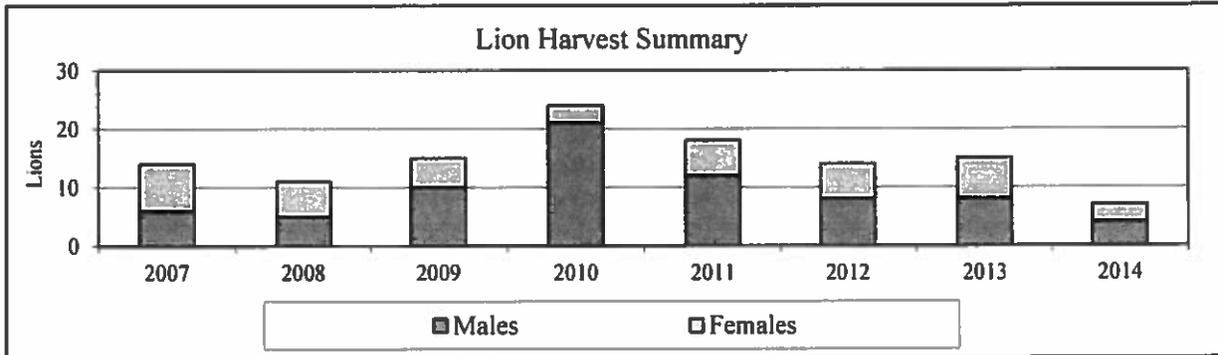
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (>3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2007 | 6 | 8 | 8 | 1 | 13% | NO |
| 2008 | 5 | 6 | 11 | 3 | 27% | NO |
| 2009 | 10 | 5 | 15 | 2 | 13% | NO |
| 2010 | 21 | 3 | 24 | 3 | 13% | NO |
| 2011 | 12 | 6 | 18 | 3 | 23% | NO |
| 2012 | 8 | 6 | 14 | 6 | 43% | YES |
| 2013 | 8 | 7 | 15 | 2 | 13% | NO |
| 2014 | 4 | 3 | 7 | | | |
| 2-Year Mean | | | | | 28% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|-------------------------------|--------------------|------------|--------------|
| Standard | July, 1, 2015 - June 30, 2016 | Unit 23 - Unitwide | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Dave Daniels
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____

Date: _____

Management Notes:

Harvest Information: The three-year mean combined harvest of sport and depredation for Unit 23 is 12 mountain lions. Reported harvest last year was 7 mountain lions in Unit 23. Harvest in the past has fluctuated between 6 (1991) and 24 (2010), but is considered to be stable. Harvest the past five years was, 24 (2010), 18 (2011), 14(2012), 15(2013) and 7 (2014).

Track Counts: Track counts are no longer conducted to monitor the mountain lion population changes.

Conclusion: The mountain lion population in Unit 23 appears to be stable and healthy. The lion harvest appears to not need more restrictions on take at this time. This year's harvest included 3 female and 4 male lions. Field observations include recognition that more mountain lions are killed during periods of snow as hunters utilizing hounds are more predominant and successful. No change from the current hunt structure is recommended.

Unit(s): 23 Species: MT. LION

Year: 2015/16

Hunt Recommendation Submitted by:

 3/5/15
Wildlife Manager Date

 3/5/15 accepted modified
Sector Supervisor Date

Comments:

 3/5/15 accepted modified
Game Specialist Date

Comments:

 3-4-15 accepted modified
Regional Supervisor Date

Comments:

 3/24/15 accepted modified
Game Branch Chief Date

Comments:

 4/20/16 accepted modified
Executive Staff Date

Comments:

Unit(s): 24A

Species: Mountain Lion

Year: 2014/15

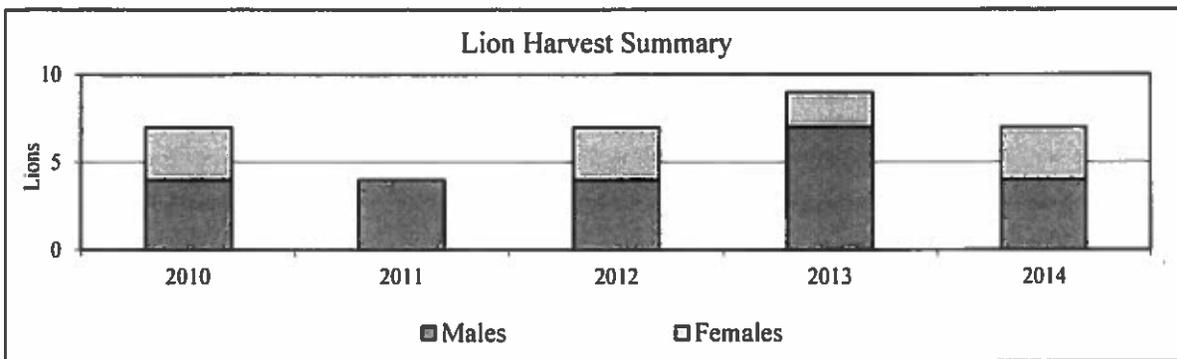
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 4 | 3 | 7 | 0 | 0% | NO |
| 2011 | 4 | 0 | 4 | 0 | 0% | NO |
| 2012 | 4 | 3 | 7 | 1 | 14% | NO |
| 2013 | 7 | 2 | 9 | 3 | 33% | NO |
| 2014 | 4 | 3 | 7 | | | |
| 2-Year Mean | | | | | 25% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



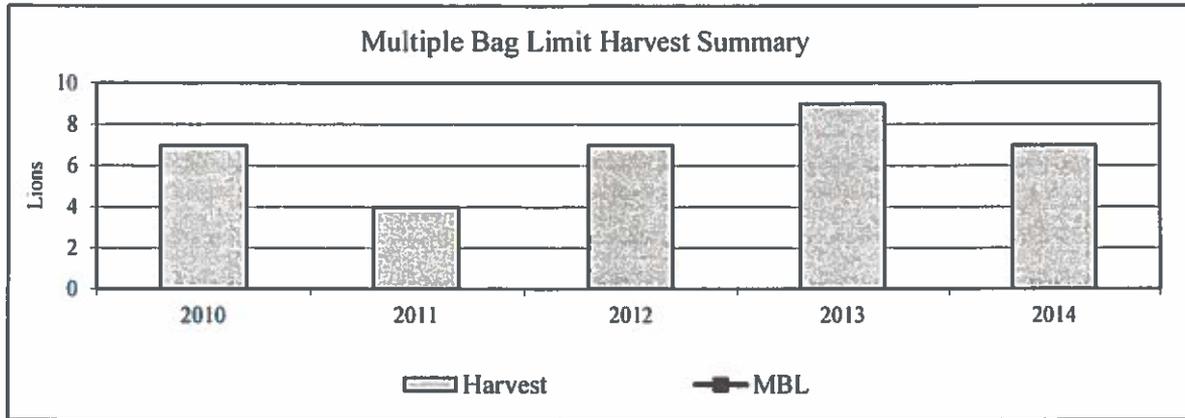
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | Unit wide | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Danny Rodriguez
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



For 2014, a total of 7 lions were reported as sport harvested of which 4 were males and 3 were females.. For 2013, a total of 9 lions were reported as sport harvested of which 7 were males and 2 were females. For 2012, a total of 4 lions were reported as sport harvested of which 1 was a male and 3 were females.

Tooth data was not available for ~~2013~~ 2014.

The unit is comprised of 810 square miles with 659 square miles classified as medium lion density and 162 miles as low mountain lion density. The population also fluctuates with the emigration-immigration of lions from San Carlos Reservation. Based on the age and harvest data, lion populations appear to be stable.

The lion distribution is unit wide and travel corridors are unknown.

I recommend the season to run from July 1, 2015-June 30, 2016. This is a no change for 2015.

Unit(s): 24A Species: MOUNTAIN LION

Year: 2015/16

Hunt Recommendation Submitted by:

[Signature] 3/5/15
Wildlife Manager Date

[Signature] 3/5/15 accepted modified
Sector Supervisor Date

Comments:

[Signature] 3/5/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-4-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/24/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 4/20/15 accepted modified
Executive Staff Date

Comments:

4



Unit(s): 24B

Species: Mountain Lion

Year: 2014/15

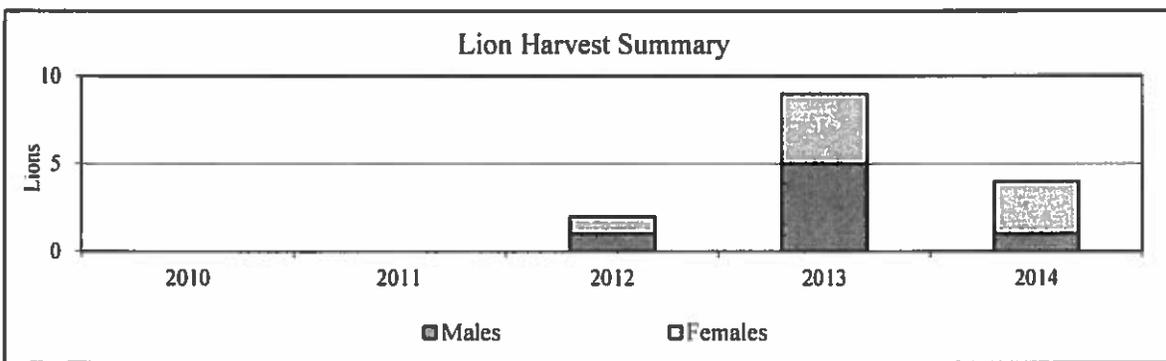
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 0 | 0 | 0 | 0 | #DIV/0! | #DIV/0! |
| 2011 | 0 | 0 | 0 | 1 | #DIV/0! | #DIV/0! |
| 2012 | 1 | 1 | 2 | 1 | 50% | YES |
| 2013 | 5 | 4 | 9 | 2 | 22% | NO |
| 2014 | 1 | 3 | 4 | | | |
| 2-Year Mean | | | | | 27% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



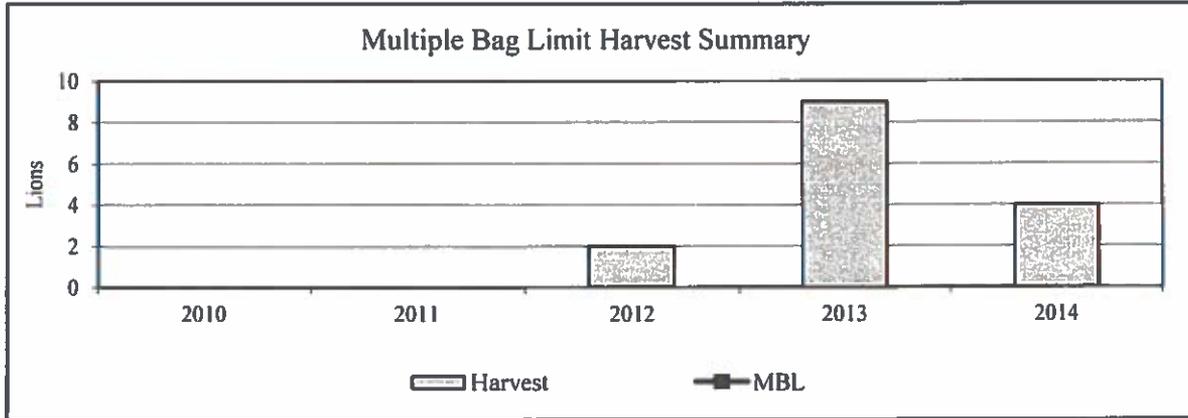
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|-------------|------------------------------|------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | Unit 24B | None | None |
| | | | | |
| | | | | |
| | | | | |

Submitted by: Kriselle Colvin
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____



Significant Management Issues, Opportunities or Challenges:

Unit 24B has historically maintained a viable lion mountain population that has sustained hunting pressures ranging from low to high levels of participation. During the decades of the 60's, and 70's local ranchers and hunters took relatively high numbers of lions. As livestock operations have changed over the years, the focus on lion hunting has shifted more toward sport hunters. As a result, there have been years of low to moderate activity, due in part to extremely rugged terrain throughout a large part of the unit. In 2013 and 2014, sport hunters appear to have taken an increased interest in Unit 24B for lion hunting. This may be attributed to the attention the unit has received as a prime bighorn sheep unit, offering increased opportunity for taking high-scoring trophy rams. Recent hunters have indicated that they have expressly taken lions in bighorn sheep habitat in order to have a positive effect on sheep numbers. As in the past, the Unit 24B lion population has demonstrated that it is able to sustain a yearlong lion season.

Unit(s): 24B Species: MTN LION

Year: 2015/16

Hunt Recommendation Submitted by:

[Signature] 13/05/2015
Wildlife Manager Date

[Signature] 3/5/15 accepted modified
Sector Supervisor Date
Comments:

[Signature] 3/5/15 accepted modified
Game Specialist Date
Comments:

[Signature] 3-4-15 accepted modified
Regional Supervisor Date
Comments:

[Signature] 3/24/15 accepted modified
Game Branch Chief Date
Comments:

[Signature] 4/20/15 accepted modified
Executive Staff Date
Comments:

Unit(s): 37B

Species: Mountain Lion

Year: 2014/15

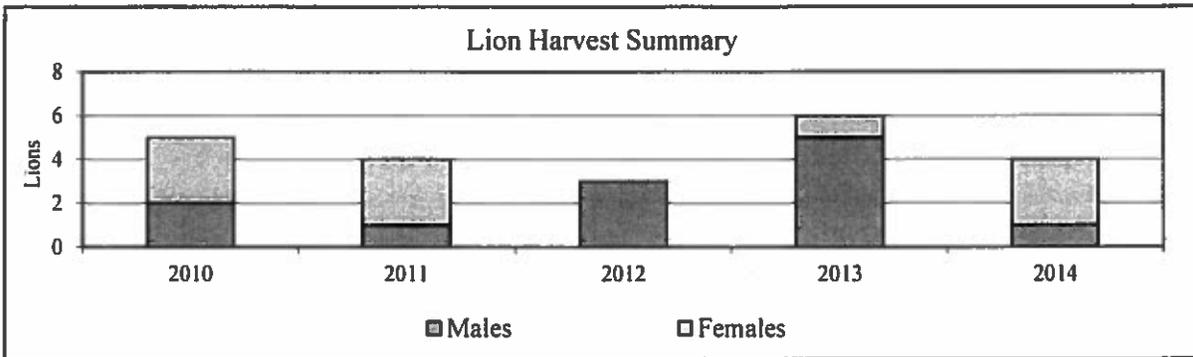
Harvest Summary:

| Year | Male Harvest | Female Harvest | Total Harvest | Adult ♀ (≥3 yrs) | % Adult ♀ in Harvest | Adult ♀ Exceed 35% of Harvest? |
|-------------|--------------|----------------|---------------|------------------|----------------------|--------------------------------|
| 2010 | 2 | 3 | 5 | 0 | 0% | NO |
| 2011 | 1 | 3 | 4 | 1 | 25% | NO |
| 2012 | 3 | 0 | 3 | | 0% | NO |
| 2013 | 5 | 1 | 6 | | 0% | NO |
| 2014 | 1 | 3 | 4 | | | |
| 2-Year Mean | | | | | 0% | NO |

Management Considerations:

*Continue Single Unit Management

*No Female Harvest Limit Indicated



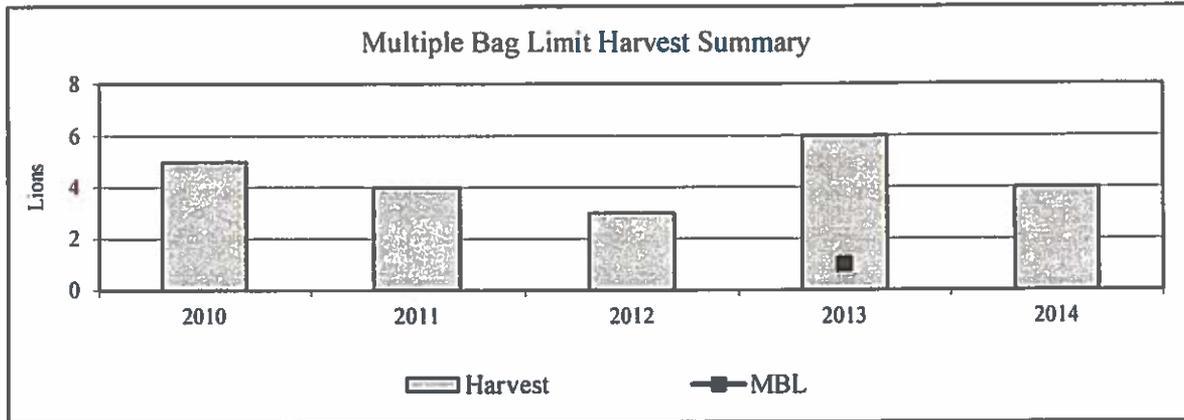
Hunt Recommendation:

| Season Type | Season Dates | Open Areas | MBL Target | Female Limit |
|--------------------------|------------------------------|------------------------------------|------------|--------------|
| Standard | July 1, 2015 - June 30, 2016 | Unit 37B | None | None |
| Multiple Bag Limit (MBL) | July 1, 2015 - June 30, 2016 | Unit 37B - North of the Gila River | 4 | None |
| | | | | |
| | | | | |

Submitted by: Kriselle Colvin
Wildlife Manager(s)

Amendments & Notes:

Game Branch Approval: _____ Date: _____

**Regional Notes:**

A total of 4 Mountain lions (1 male) were harvested from Unit 37B in 2014. Calculated adult female harvest is less than 35% of total harvest and is within guidelines.

The mountain lion population in Unit 37B appears to be stable and healthy from the harvest information, therefore I recommend no change from the current hunt structure.

Significant Management Issues, Opportunities or Challenges:

The portion of Unit 37B north of the Gila River will continue to be managed with the Multiple Bag Limit. Hunters are taking advantage of Daylong Shooting Hours hunt structure for mountain lion hunting opportunities in Unit 37B North, at least one of the lions harvested in 2012 was at night.

A multiple bag limit (MBL) for mountain lions was proposed in 2011 for Game Management Unit (GMU) 37B for 3 reasons with the first being the primary goal and the second two being ancillary benefits to the initiation of a MBL. They are: 1) to establish a viable population of bighorn sheep in suitable but mostly unoccupied bighorn habitat in the Mineral Mountains in northern GMU 37B, 2) to increase hunter opportunity, and 3) to reduce lion depredations on livestock.

Goal 1: To establish a viable population of bighorn sheep in suitable but mostly unoccupied bighorn habitat in the Mineral Mountains in northern GMU 37B. Once targets have been achieved for which the MBL was established, the MBL hunt structure will be removed from GMU 37B.

MEASURABLE OBJECTIVES

* The MBL will be discontinued in GMU 37B once a viable population of bighorn sheep has become established in suitable but mostly unoccupied bighorn habitat in the Mineral Mountains; or -

* After a period of five years and the determination has been made that the continued use of a MBL is not beneficial or necessary for the establishment of a viable sheep population.

* Once the MBL is discontinued and a viable population of sheep becomes established; it may be reinstated at a later date if sheep population levels fall to or below 30 individuals.

Background and Summary of efforts thus far in the Minerals - 2003 to Current

The Mineral Mountains have been identified in AGFD and BLM documents for the last two decades as a priority area to establish a robust population of desert bighorn sheep. In 2000, AGFD conducted a statewide bighorn sheep habitat analysis using the Cunningham/Hansen Habitat Evaluation Model (Lee et al. 2000), and the Mineral Mountains area rated as the highest currently unoccupied bighorn sheep habitat in southern Arizona.

In November of 2003 the first transplant of 30 sheep was done. These sheep were from several sources in Region 4. Eleven of these sheep were outfitted with radio telemetry collars. In 2007, 10 more sheep were transplanted, these were also from Region 4. Four of these sheep were outfitted with radio collars. During the time these collars were monitored there were zero confirmed mortalities although several attempts were made to retrieve collars emitting mortality signals, it was determined that the sheep were still alive and moving which made retrieval impossible.

In November 2010, another 30 bighorn sheep were translocated from within Region 6, specifically units 22 and 24B, twenty of the sheep were outfitted with tracking collars. While those collars were active there were 6 mortalities on bighorns; 3 ewes and 3 young rams. It was confirmed that one of the young rams and one of the ewes were killed by mountain lions. These confirmed lion kills coupled with two of the other mortalities being of unknown cause has raised interest in more proactive lion management

To that end, in April of 2011 the Arizona Desert Bighorn Sheep Society petitioned the Game and Fish Commission to have them reinstate the previous multiple bag limit for Unit 37B to facilitate problem lion removal in the Mineral Mountain area. This multiple bag limit was previously in place from July 1, 2003 to June 30, 2006 during which time according to data gathered by the department zero lions were removed from northern Unit 37B although there were 14 lions removed from southern 37B in that same time frame. Although zero lions were removed from the Mineral Mountain area during that time it is possible that the increase in lions taken out of the southern half of the unit could have affected the general population.

The final transplant for the project was completed in November 2012, 30 sheep were moved from Units 22/24B. Ten of those sheep were outfitted with Lotek GPS collars which are no longer functional as of November 2014. There were 2 mortalities on collared sheep 1 of which was possibly due to Mountain Lion predation. The 2012 transplant brought the total number of sheep transplanted for the project to 100.

Unit(s): 37B Species: MTN LION

Year: 2015/16

Hunt Recommendation Submitted by:

Arsette Ann 03/05/2015
Wildlife Manager Date

Paul Holt 3/5/15 accepted modified
Sector Supervisor Date

Comments:

Dustin Dan 3/5/15 accepted modified
Game Specialist Date

Comments:

[Signature] 3-4-15 accepted modified
Regional Supervisor Date

Comments:

[Signature] 3/24/15 accepted modified
Game Branch Chief Date

Comments:

[Signature] 7/20/15 accepted modified
Executive Staff Date

Comments:

