# 2011 - JCR Evaluation Form

SPECIES: Pronghorn

PERIOD: 6/1/2011 - 5/31/2012

HERD: PR202 - BIG HORN

HUNT AREAS: 79, 116

PREPARED BY: TOM EASTERLY

| | 2006 - 2010 Average | 2011 | 2012 Proposed |
|---|---|---|---|
| Population: | 0 | N/A | N/A |
| Harvest: | 23 | 53 | 35 |
| Hunters: | 37 | 65 | 50 |
| Hunter Success: | 62% | 82% | 70% |
| Active Licenses: | 37 | 69 | 55 |
| Active License Percent: | 62% | 77% | 64% |
| Recreation Days: | 197 | 223 | 200 |
| Days Per Animal: | 8.6 | 4.2 | 5.7 |
| Males per 100 Females | 47 | 73 | |
| Juveniles per 100 Females | 60 | 66 | |

| | |
|---|---|
| Population Objective: | 0 |
| Management Strategy: | Recreational |
| Percent population is above (+) or below (-) objective: | N/A% |
| Number of years population has been + or - objective in recent trend: | 0 |
| Model Date: | None |

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

| | JCR Year | Proposed |
|---|---|---|
| Females 1 year old: | | |
| Males 1 year old: | No population model or estimate | |
| Juveniles (< 1 year old): | exist for this herd | |
| Total: | | |
| Proposed change in post-season population: | | |

## 2006 - 2011 Harvest Age Structure

for Pronghorn Herd PR203 - COPPER MOUNTAIN

| | Males | | | | | | | | | | Females | | | | | | | | | | Herd |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Juv | 1 | % 1 * | 2 | 3 ^ | % 3 ** | Total Aged ++ | Not Aged +++ | Unk | Total Chkd | Juv | 1 | % 1 * | 2 | 3 ^ | % 3 ** | Total Aged ++ | Not Aged +++ | Unk | Total Chkd | Total |
| 2006 | 1 | 1 | 3% | 12 | 18 | 58% | 32 | 7 | 0 | 39 | 4 | 1 | 17% | 1 | 3 | 60% | 9 | 1 | 0 | 10 | 49 |
| 2007 | 2 | 0 | 0% | 7 | 17 | 71% | 26 | 4 | 0 | 30 | 1 | 2 | 14% | 7 | 3 | 25% | 13 | 2 | 0 | 15 | 45 |
| 2008 | 3 | 1 | 4% | 4 | 20 | 80% | 28 | 2 | 0 | 30 | 5 | 2 | 12% | 4 | 4 | 40% | 15 | 6 | 3 | 24 | 54 |
| 2009 | 1 | 1 | 7% | 1 | 12 | 86% | 15 | 0 | 0 | 15 | 0 | 0 | 0% | 2 | 12 | 86% | 14 | 0 | 7 | 21 | 36 |
| 2010 | 5 | 0 | 0% | 2 | 23 | 92% | 30 | 3 | 1 | 34 | 3 | 0 | 0% | 0 | 8 | 100% | 11 | 10 | 4 | 25 | 59 |
| 2011 | 1 | 0 | 0% | 12 | 18 | 60% | 31 | 1 | 4 | 36 | 2 | 0 | 0% | 7 | 6 | 46% | 15 | 0 | 0 | 15 | 51 |

* Percent of aged animals (including unaged adults but excluding juveniles) 1 1/2 years old

^ Number of animals three years old and older. Animals aged older than three (excluding unaged adults) are lumped into this three plus category

** Percent of aged animals (not including juveniles or unaged adults) three years old or older

++ includes juveniles

+++ Unaged adults - unaged animals older than yearlings

## 2012 Proposed HUNTING SEASON
## Copper Mountain Antelope (PR203)

| Hunt Area | Type | Date of Seasons Opens | Closes | Limitations |
|---|---|---|---|---|
| 76 | 1 | Oct. ~~9~~1 | Oct. 31 | Limited quota; 125 licenses any antelope |
| | 2 | Aug. 15 | Sept. ~~15~~30 | Limited quota; 25 licenses any antelope valid in that portion of Area 76 within two (2) miles of the Bighorn River |
| | 6 | Sept. 1 | Oct. 31 | Limited quota; 25 licenses doe or fawn |
| | 7 | Aug. 15 | Nov. 15 | Limited quota; ~~150~~ 75 licenses doe or fawn valid in that portion of Area 76 within two (2) miles of the Bighorn River |
| 114 | 1 | Oct. 1 | Oct. 31 | Limited quota; 50 licenses any antelope |
| | 2 | Sept. 1 | Sept.30 | Limited quota; 50 licenses any antelope valid on private land or State Trust land |
| | 6 | Sept. 1 | Nov. 15 | Limited quota; 150 licenses doe or fawn valid on private land or State Trust land |
| 115 | 1 | Oct. ~~9~~1 | Oct. 31 | Limited quota; ~~200~~ 150 licenses any antelope |
| | 6 | Oct. ~~9~~1 | Oct. 31 | Limited quota; ~~225~~ 175 licenses doe or fawn valid in that portion of Area 115 east of the Nowood River, or south and west of Cornell Gulch or Nowater Stock Trail (BLM Road 1404) |

ARCHERY:
76, 114, 115 Aug. 15 Refer to Section 4

Summary of Proposed Changes in License Number

| Area | Type | Change from 2011 |
|---|---|---|
| 76 | 7 | -75 lic. |
| 115 | 6 | -50 lic. |
| 115 | 1 | -50 lic. |
| **Total PR203** | **1** | **-50** |
| | **6** | **-50** |
| | **7** | **-75** |

### SEASON JUSTIFICATION

In area 76 and 115, the opening date for type 1 licenses will change to October 1 due to a 2012 packet change. The type 2 season in area 76 will be extended to allow more hunter opportunity. The type 7 license quota in area 76 will be reduced by 75 licenses since damage concerns have decreased. Area 115 will see a reduction to the type 1 and 6 license quotas, due to a dramatic decline in pronghorn numbers because of the severe winter conditions of 2010/11. Area 115 as also experienced a 54% decline in fawn ratios the past 6 years.

Based on this season structure, 300 bucks and 250 does and fawns should be harvested, a total of 12% of the 2012 pre-season population. The population objective for this herd unit is 4,800 antelope. The current POP-II model estimates a 2011 post-season population of about 4,100 antelope, or 15% below objective. The model is considered reliable since it tracks well with observed data and is aligned to the 2007 line transect estimate of 4,089 pronghorn.

Data Set: PR203.GN1 05/17/2012 08:35 am Page 1

2011 Copper Mountain Pronghorn (PR203)
Data from 1995 to 2012 Simulation from 2007 to 2012

| Age Class | Init Pop. Male | Prop. Female | Presn Male | Mort% Female | Postsn Mort% Male | Mort% Female | Effort Set 1 Male | Effort Set 1 Female | Effort Set 2 Male | Effort Set 2 Female |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1358.0 | 1358.0 | 50.0 | 50.0 | 38.0 | 36.0 | 0.05 | 0.05 | 0.05 | 0.05 |
| 1 | 400.0 | 500.0 | 2.0 | 2.0 | 7.0 | 5.0 | 0.20 | 1.00 | 0.20 | 1.00 |
| 2 | 200.0 | 375.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 3 | 100.0 | 325.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 4 | 75.0 | 175.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 5 | 28.0 | 100.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 6 | 14.0 | 75.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 7 | 6.0 | 60.0 | 2.0 | 2.0 | 5.0 | 5.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 8 | 2.0 | 50.0 | 2.0 | 2.0 | 8.0 | 6.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 9 | 1.0 | 40.0 | 2.0 | 2.0 | 15.0 | 10.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 10 | 2.0 | 30.0 | 2.0 | 2.0 | 30.0 | 20.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 11 | 0.0 | 20.0 | 2.0 | 2.0 | 60.0 | 40.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 12 | 0.0 | 10.0 | 2.0 | 2.0 | 80.0 | 60.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 13 | 0.0 | 0.0 | 2.0 | 2.0 | 100.0 | 100.0 | 1.00 | 1.00 | 1.00 | 1.00 |

Sum = 5304.0 Estimated Sum = 8230 Subadults: Ages 0 to 0

Data Set: PR203.GN1 05/17/2012 08:35 am Page 2

MSI Function is Linear

| Bio-Year | Preseason MSI | Harvest // Des. Pop Size in NA Subadults# | Males# | Females# | Postseason MSI | Effort & Wound Set Used |
|---|---|---|---|---|---|---|
| 1995 | 1.13 | 15 | 260 | 117 | 1.00 | 1 |
| 1996 | 1.14 | 0 | 213 | 59 | 1.00 | 1 |
| 1997 | 1.38 | 5 | 231 | 41 | 1.16 | 1 |
| 1998 | 1.10 | 9 | 257 | 34 | 0.80 | 1 |
| 1999 | 1.15 | 22 | 260 | 108 | 0.80 | 1 |
| 2000 | 1.36 | 13 | 239 | 152 | 1.21 | 1 |
| 2001 | 1.64 | 6 | 213 | 77 | 1.20 | 1 |
| 2002 | 1.61 | 5 | 212 | 67 | 1.20 | 1 |
| 2003 | 1.00 | 2 | 211 | 50 | 1.30 | 1 |
| 2004 | 1.31 | 10 | 213 | 62 | 1.30 | 1 |
| 2005 | 0.75 | 7 | 219 | 60 | 1.36 | 1 |
| 2006 | 0.71 | 12 | 197 | 89 | 1.45 | 1 |
| 2007 | 1.24 | 16 | 200 | 136 | 1.33 | 1 |
| 2008 | 1.30 | 30 | 220 | 201 | 0.95 | 1 |
| 2009 | 1.16 | 28 | 227 | 239 | 1.35 | 1 |
| 2010 | 1.38 | 69 | 302 | 360 | 1.35 | 1 |
| 2011 | 1.35 | 37 | 350 | 301 | 1.10 | 1 |
| 2012 | 1.25 | 25 | 300 | 225 | 1.10 | 1 |
| Set 1 Wounding Loss | | 10.% | 10.% | 10.% | Yearling Male 10.% | |
| Set 1 Wounding Loss | | 10.% | 10.% | 10.% | Yearling Male 10.% | |

Data Set: PR203.GN1 05/17/2012 08:35 am Page 3

| Bio-Year | Young/100 Fems Age 1 - 1 | Young/100 Fems Age 2 - 12 | Young/100 Fems Age 13 - 13 | Sex Ratio: 50 : 50 |
|---|---|---|---|---|

| Bio-Year | Young/100 Fems Age 1 - 1 | Young/100 Fems Age 2 - 12 | Young/100 Fems Age 13 - 13 | Sex Ratio: 50 : 50 |
|---|---|---|---|---|
| 1996 | 0.0 | 180.0 | 0.0 | |
| 1997 | 0.0 | 180.0 | 0.0 | |
| 1998 | 0.0 | 180.0 | 0.0 | |
| 1999 | 0.0 | 180.0 | 0.0 | |
| 2000 | 0.0 | 180.0 | 0.0 | |
| 2001 | 0.0 | 180.0 | 0.0 | |
| 2002 | 0.0 | 180.0 | 0.0 | |
| 2003 | 0.0 | 180.0 | 0.0 | |
| 2004 | 0.0 | 180.0 | 0.0 | |
| 2005 | 0.0 | 180.0 | 0.0 | |
| 2006 | 0.0 | 180.0 | 0.0 | |
| 2007 | 0.0 | 180.0 | 0.0 | |
| 2008 | 0.0 | 180.0 | 0.0 | |
| 2009 | 0.0 | 180.0 | 0.0 | |
| 2010 | 0.0 | 180.0 | 0.0 | |
| 2011 | 0.0 | 180.0 | 0.0 | |
| 2012 | 0.0 | 180.0 | 0.0 | |
| 2013 | 0.0 | 0.0 | 0.0 | |

POP-II (V1.2.5) Simulation Output Tables for PR203.GN1, 05/17/2012 08:35 am

Table 1. Population Size During Bio-Year for PR203.GN1 05/17/2012 08:35 am

| Bio-Year | Start | Pre-Season | Post Season | End | %Growth |
|---|---|---|---|---|---|
| 2007 | 8230 | 5518 | 5130 | 4088 | 0.6 |
| 2008 | 8275 | 5447 | 4951 | 4268 | 2.0 |
| 2009 | 8439 | 5921 | 5378 | 4246 | -1.2 |
| 2010 | 8340 | 5398 | 4594 | 3748 | -10.2 |
| 2011 | 7487 | 4862 | 4105 | 3449 | -9.2 |
| 2012 | 6800 | 4620 | 4015 | 3333 | -51.0 |

Table 3. Harvest Mortality for PR203.GN1 05/17/2012 08:35 am

| Bio-Year | Sub-Adults | Adult Males | Adult Females | Total | % of Pop |
|---|---|---|---|---|---|
| 2007 | 16 | 200 | 136 | 352 | 6.4 |
| 2008 | 30 | 220 | 201 | 451 | 8.3 |
| 2009 | 28 | 227 | 239 | 494 | 8.3 |
| 2010 | 69 | 302 | 360 | 731 | 13.5 |
| 2011 | 37 | 350 | 301 | 688 | 14.2 |
| 2012 | 25 | 300 | 225 | 550 | 11.9 |

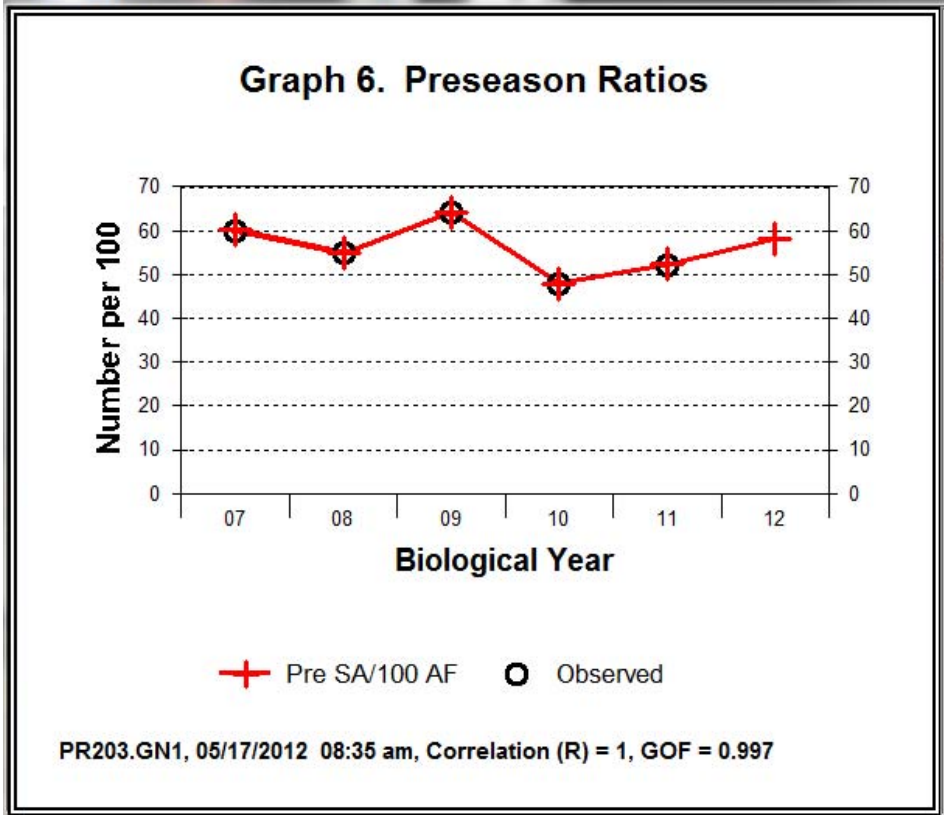
Table 4. Harvest Percentages for PR203.GN1 05/17/2012 08:35 am

| Bio-Year | Sub-Adults | Adult Males | Adult Females | Total | Yearling Males |
|---|---|---|---|---|---|
| 2007 | 1.0 | 16.0 | 5.1 | 6.38 | 15.7 |
| 2008 | 2.0 | 16.8 | 7.5 | 8.28 | 7.6 |
| 2009 | 1.6 | 15.8 | 8.8 | 8.34 | 8.3 |
| 2010 | 5.4 | 20.4 | 13.6 | 13.54 | 7.0 |
| 2011 | 3.0 | 26.4 | 13.0 | 14.15 | 5.1 |
| 2012 | 2.0 | 25.0 | 10.4 | 11.91 | 7.2 |

Table 7. Postseason Ratios for PR203.GN1 05/17/2012 08:35 am

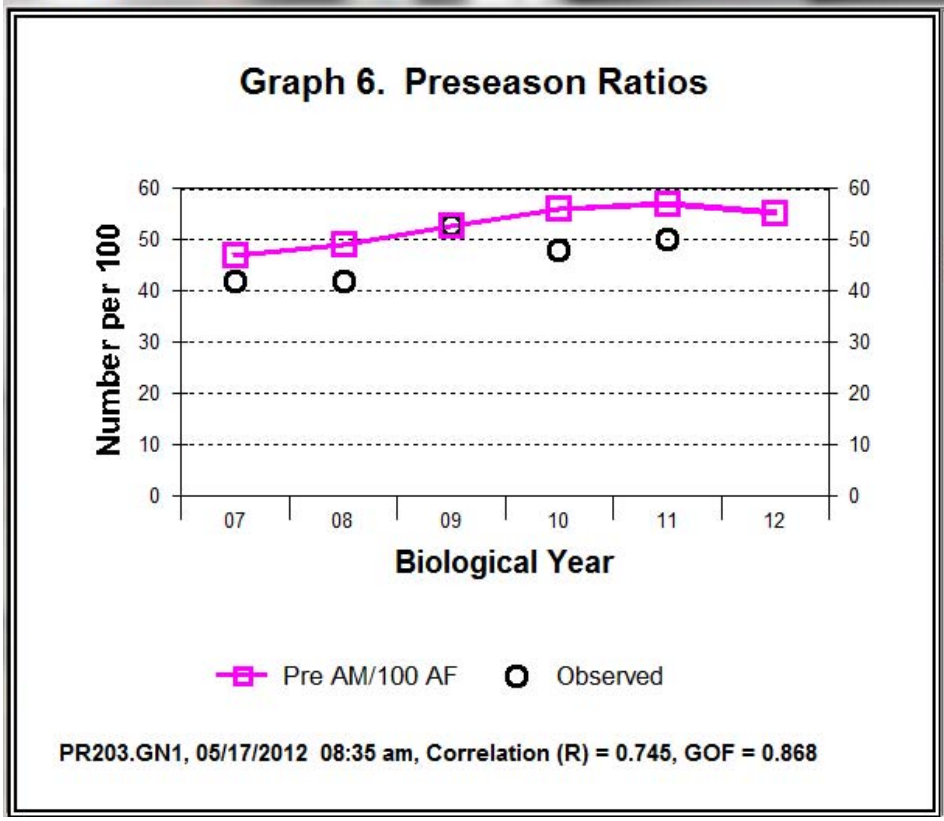
| Bio-Year | Subadults /100 1+F | 2+ Males /100 1+F | Yr. Males /100 1+F | Ad Males /100 1+F |
|---|---|---|---|---|
| 2007 | 63.0 | 18.4 | 22.7 | 41.1 |
| 2008 | 58.5 | 28.8 | 14.8 | 43.6 |
| 2009 | 69.8 | 31.0 | 17.3 | 48.3 |
| 2010 | 53.1 | 34.1 | 17.1 | 51.2 |
| 2011 | 59.0 | 34.0 | 13.2 | 47.2 |
| 2012 | 64.1 | 29.2 | 16.2 | 45.3 |

POP-II (V1.2.5) Graph 6. Preseason Ratios



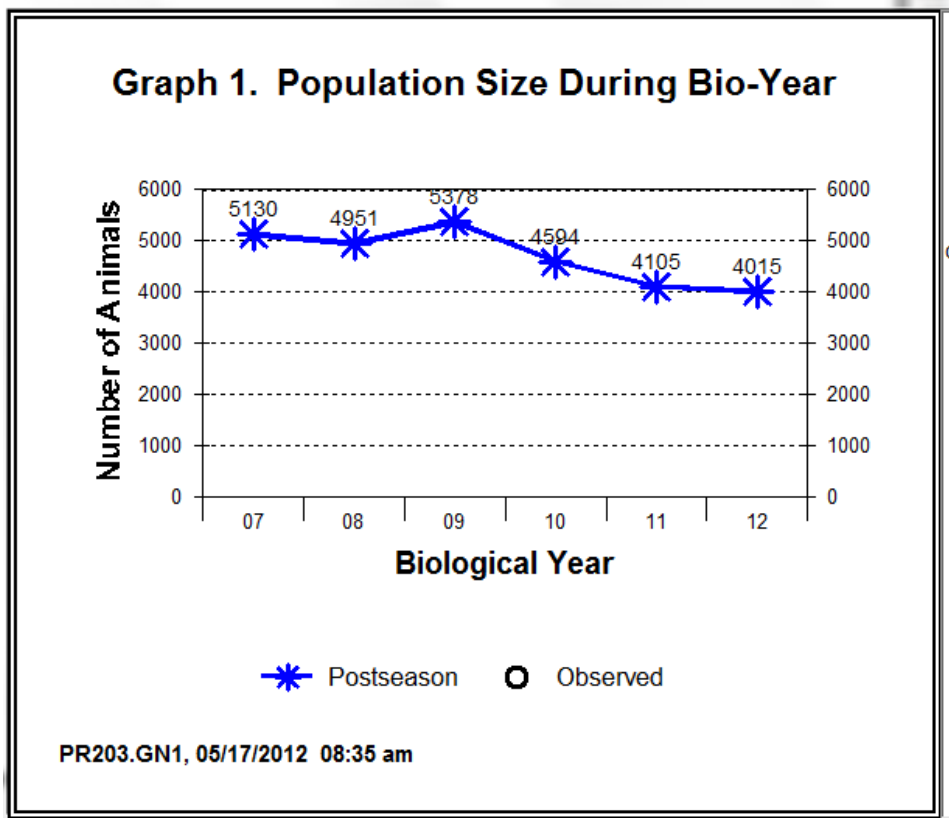

| YR | SIM | OBS |
|---|---|---|
| 07 | 60 | 60 |
| 08 | 55 | 55 |
| 09 | 64 | 64 |
| 10 | 48 | 48 |
| 11 | 52 | 52 |
| 12 | 58 | ----- |
| | AVERAGES | |
| of Col. | 56 | |
| of Pair | 56 | 56 |

POP-II (V1.2.5) Graph 6. Preseason Ratios



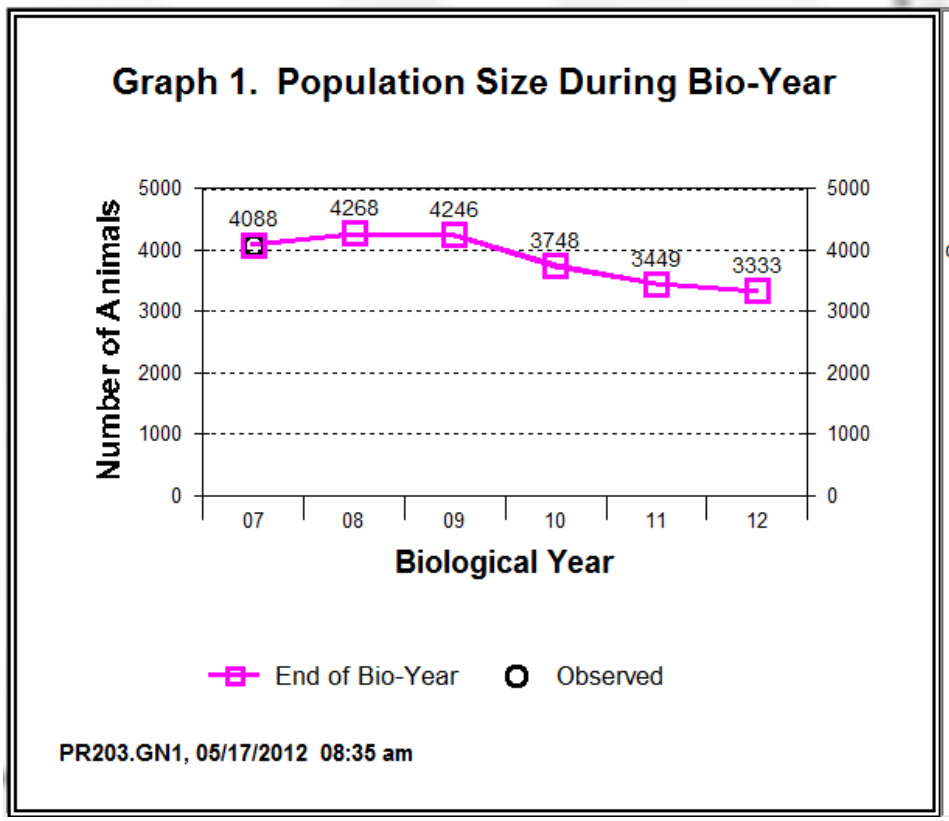

| YR | SIM | OBS |
|---|---|---|
| 07 | 47 | 42 |
| 08 | 49 | 42 |
| 09 | 53 | 53 |
| 10 | 56 | 48 |
| 11 | 57 | 50 |
| 12 | 55 | ----- |
| | AVERAGES | |
| of Col. | 53 | |
| of Pair | 52 | 47 |

POP-II (V1.2.5) Graph 1. Population Size During Bio-Year

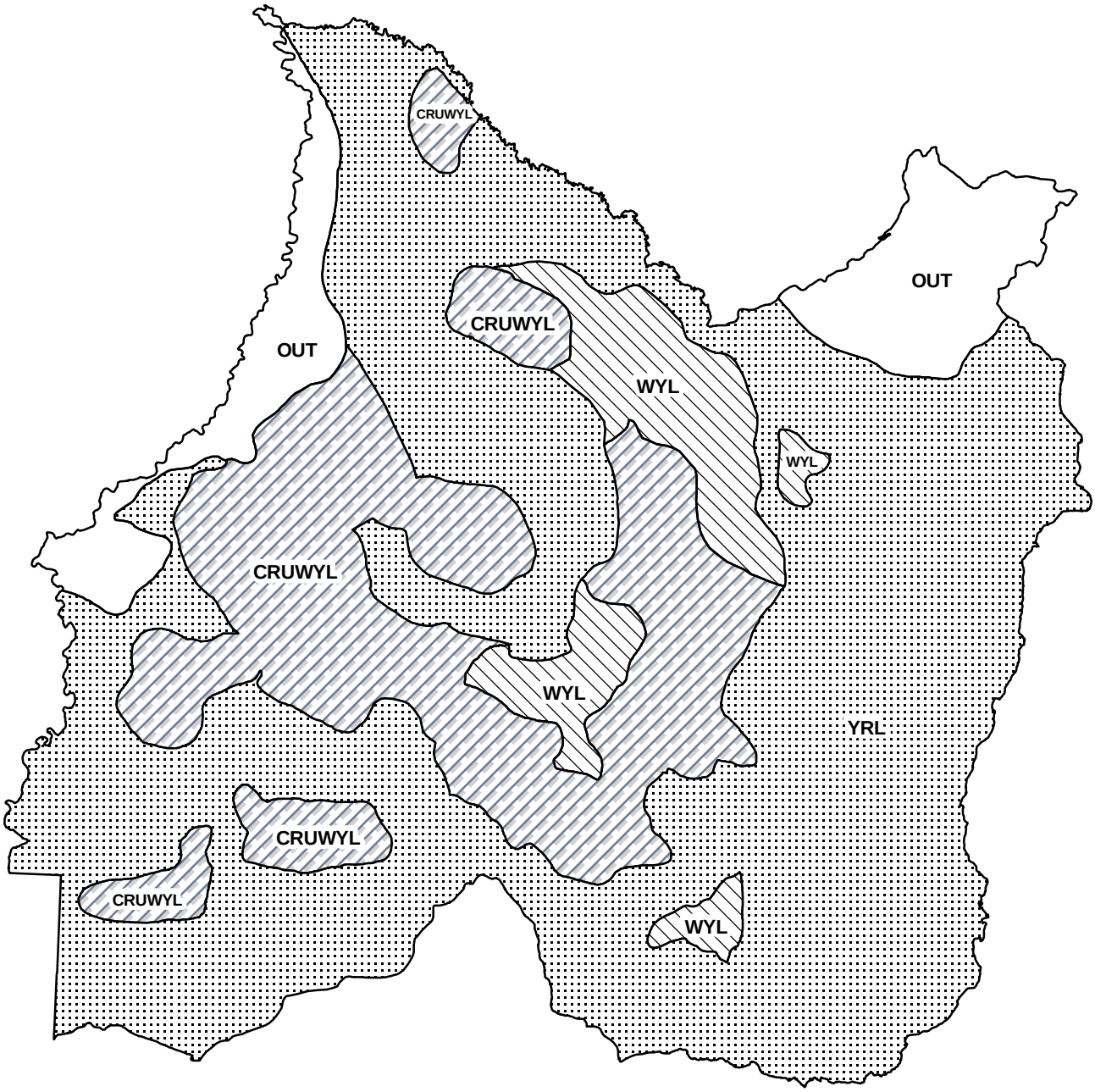



| YR | SIM | OBS |
|---|---|---|
| 07 | 5130 | ----- |
| 08 | 4951 | ----- |
| 09 | 5378 | ----- |
| 10 | 4594 | ----- |
| 11 | 4105 | ----- |
| 12 | 4015 | ----- |
| | AVERAGES | |
| of Col. | 4695 | |

POP-II (V1.2.5) Graph 1. Population Size During Bio-Year




| YR | SIM | OBS |
|---|---|---|
| 07 | 4088 | 4089 |
| 08 | 4268 | ----- |
| 09 | 4246 | ----- |
| 10 | 3748 | ----- |
| 11 | 3449 | ----- |
| 12 | 3333 | ----- |
| | AVERAGES | |
| of Col. | 3855 | |




Pronghorn (A203) - Copper Mountain
HA 76, 114, 115
Revised 4/2006

# 2011 - JCR Evaluation Form

SPECIES: Pronghorn | PERIOD: 6/1/2011 - 5/31/2012

HERD: PR204 - FIFTEENMILE

HUNT AREAS: 77, 83, 110 | PREPARED BY: BART KROGER

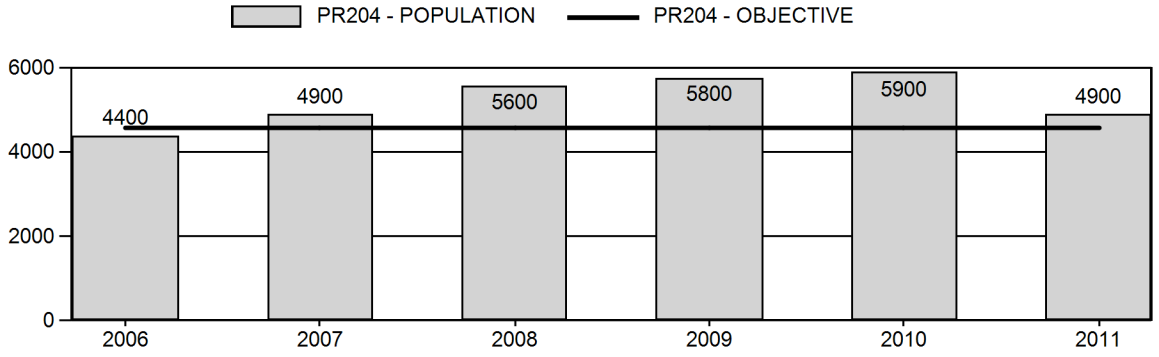
| | 2006 - 2010 Average | 2011 | 2012 Proposed |
|---|---|---|---|
| Population: | 5,320 | 4,900 | 4,600 |
| Harvest: | 394 | 796 | 750 |
| Hunters: | 379 | 737 | 700 |
| Hunter Success: | 104% | 108% | 107% |
| Active Licenses: | 437 | 876 | 850 |
| Active License Percent: | 90% | 91% | 88% |
| Recreation Days: | 1,225 | 2,522 | 2,400 |
| Days Per Animal: | 3.1 | 3.2 | 3.2 |
| Males per 100 Females | 42 | 38 | |
| Juveniles per 100 Females | 56 | 48 | |

| | |
|---|---|
| Population Objective: | 4,600 |
| Management Strategy: | Recreational |
| Percent population is above (+) or below (-) objective: | 7% |
| Number of years population has been + or - objective in recent trend: | 5 |
| Model Date: | 5/17/2012 |

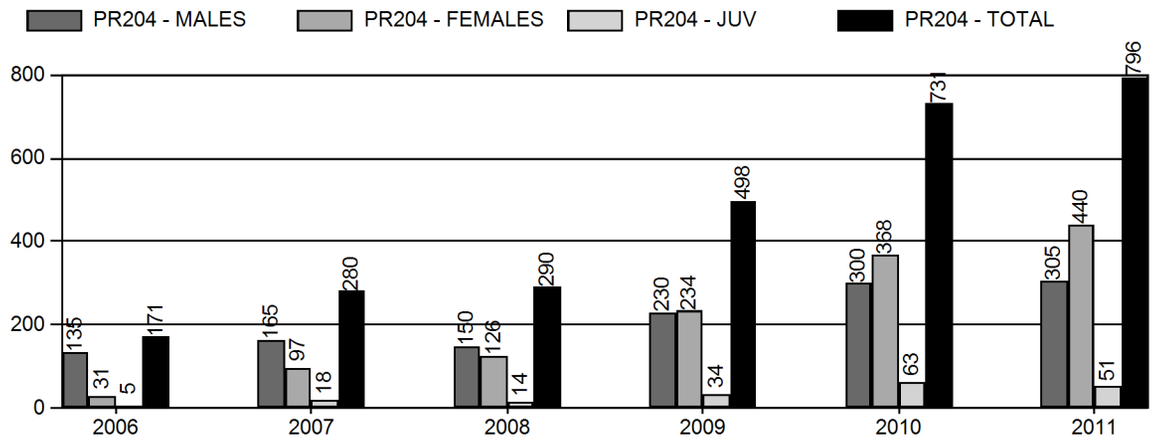
**Proposed harvest rates (percent of pre-season estimate for each sex/age group):**

| | JCR Year | Proposed |
|---|---|---|
| Females ≥ 1 year old: | 15.6% | 16% |
| Males ≥ 1 year old: | 18.9% | 19.5% |
| Juveniles (< 1 year old): | 3.8% | 3.6% |
| Total: | 13.8% | 13.8% |
| Proposed change in post-season population: | 0% | -2% |

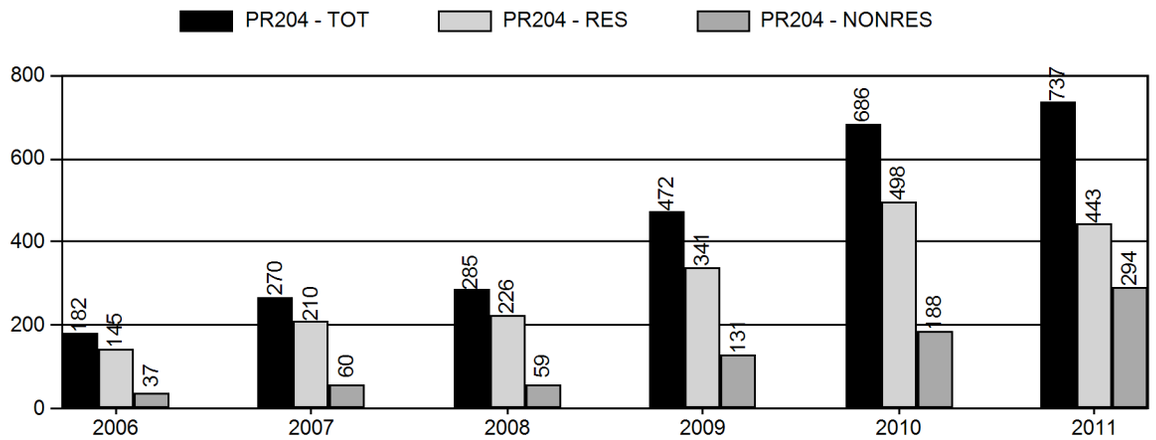
## Population Size - Postseason



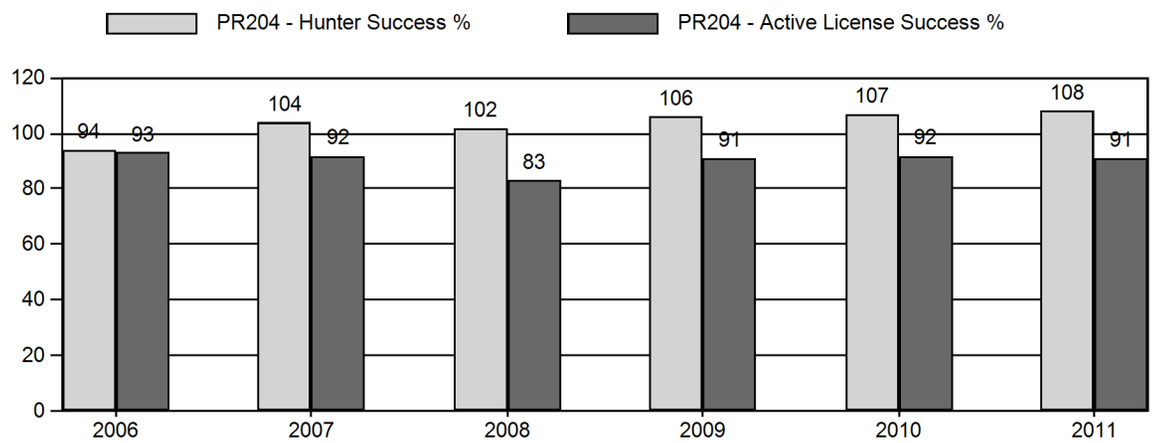
# Harvest



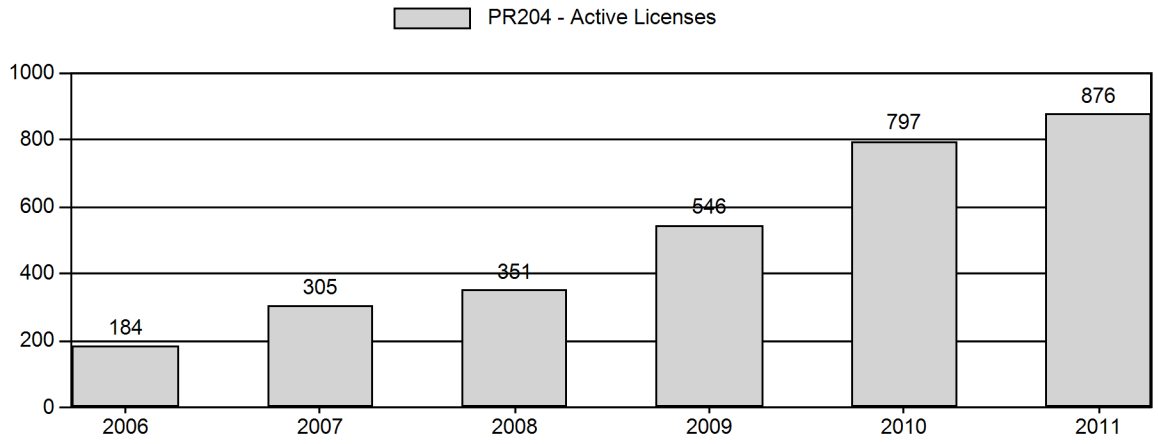

# Number of Hunters



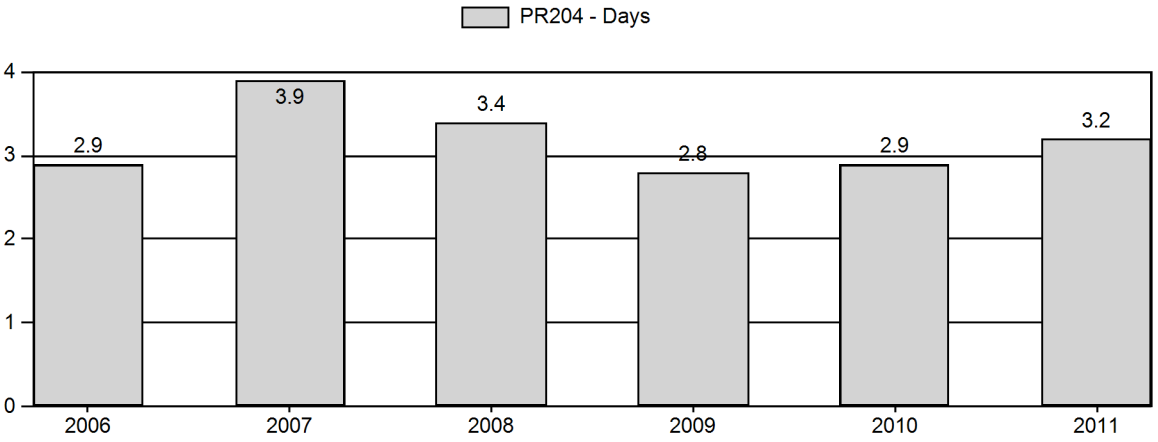

# Harvest Success



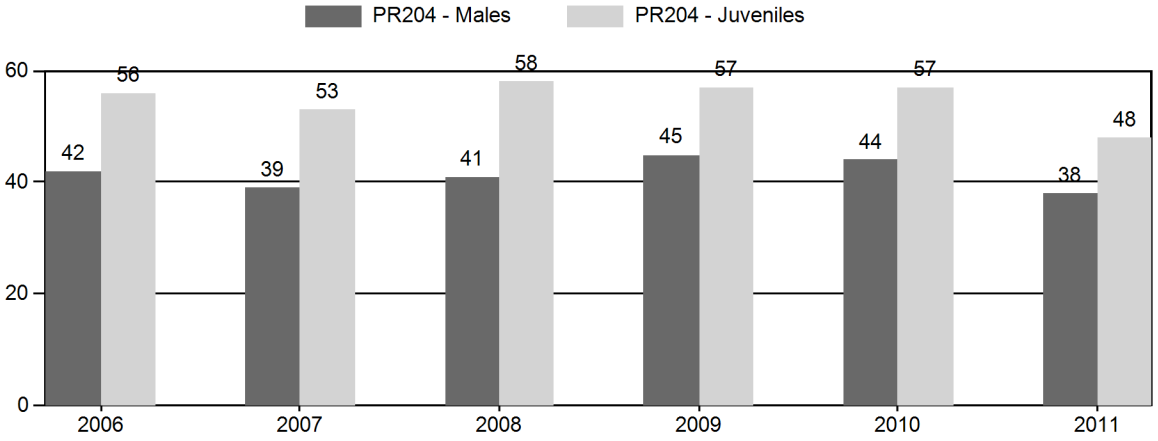
# Active Licenses



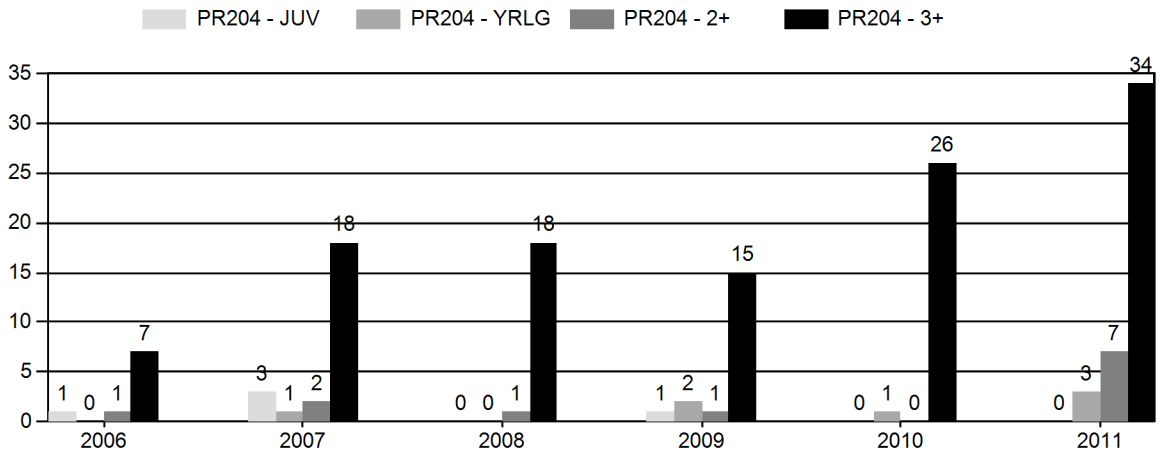

# Days Per Animal Harvested



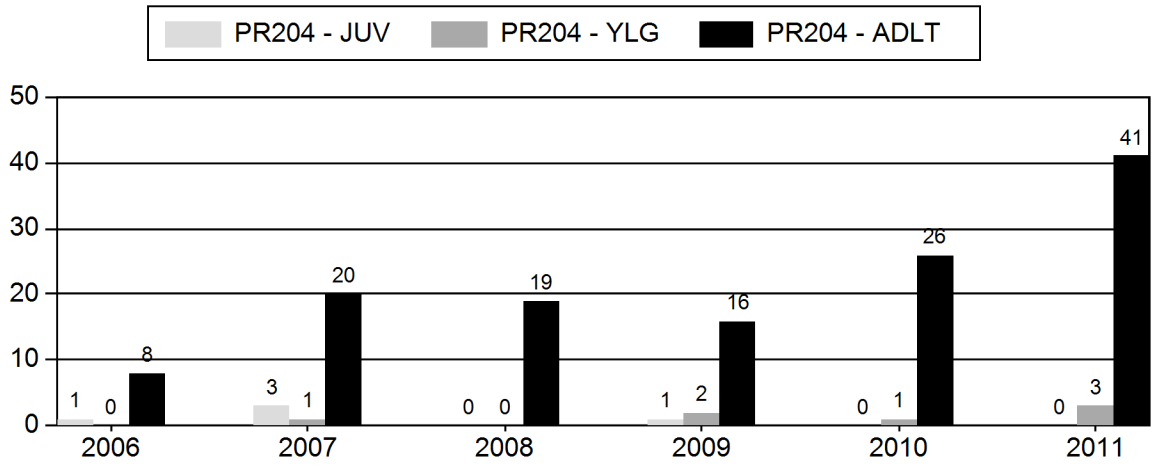

# Preseason Animals per 100 Females



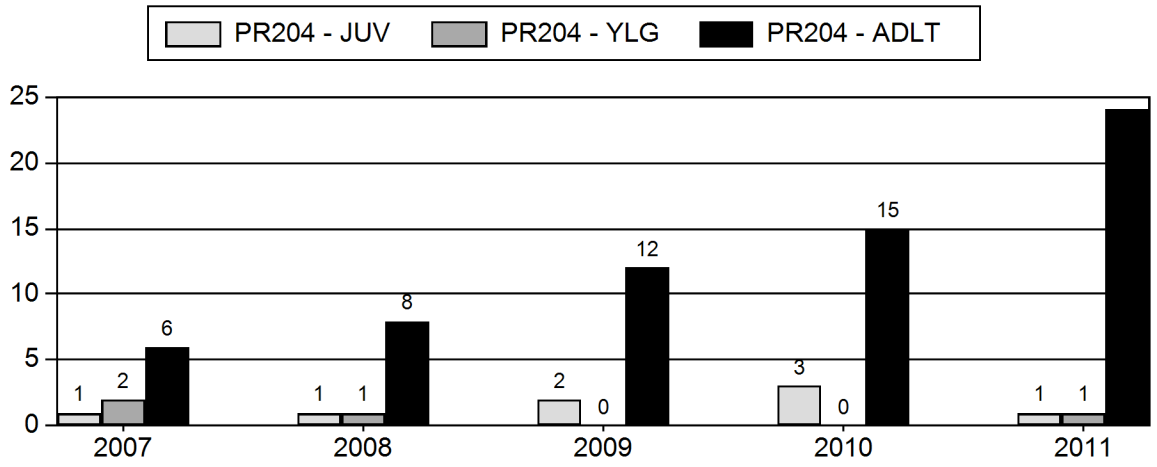
## Age Structure of Field Checked Males




## Age Structure Data (Field and Laboratory) - Male




## Age Structure Data (Field and Laboratory ) - Female



## 2006 - 2011 Preseason Classification Summary

for Pronghorn Herd PR204 - FIFTEENMILE

| | | MALES | | | | FEMALES | | JUVENILES | | | | Males to 100 Females | | | | Young to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Pre Pop | Ylg | Adult | Total | % | Total | % | Total | % | Tot Cls | Cls Obj | Ylng | Adult | Total | Conf Int | 100 Fem | Conf Int | 100 Adult |
| 2006 | 4,600 | 0 | 0 | 352 | 21% | 843 | 51% | 473 | 28% | 1,668 | 1,326 | 0 | 0 | 42 | ± 3 | 56 | ± 4 | 40 |
| 2007 | 5,200 | 0 | 0 | 387 | 20% | 999 | 52% | 531 | 28% | 1,917 | 1,248 | 0 | 0 | 39 | ± 3 | 53 | ± 4 | 38 |
| 2008 | 5,900 | 0 | 0 | 428 | 20% | 1,053 | 50% | 611 | 29% | 2,092 | 1,413 | 0 | 0 | 41 | ± 3 | 58 | ± 4 | 41 |
| 2009 | 6,400 | 0 | 0 | 480 | 22% | 1,069 | 49% | 611 | 28% | 2,160 | 1,406 | 0 | 0 | 45 | ± 3 | 57 | ± 4 | 39 |
| 2010 | 6,700 | 0 | 0 | 439 | 22% | 1,008 | 50% | 572 | 28% | 2,019 | 1,411 | 0 | 0 | 44 | ± 3 | 57 | ± 4 | 40 |
| 2011 | 5,800 | 0 | 0 | 404 | 20% | 1,060 | 54% | 507 | 26% | 1,971 | 1,147 | 0 | 0 | 38 | ± 3 | 48 | ± 3 | 35 |

# 2011 HUNTING SEASONS

PR204 - FIFTEENMILE

| Hunt Area | Add'l Hunt Areas | Type | Quota | Season Dates | Limitations |
|---|---|---|---|---|---|
| 77 | | ARCH | | 08/15 - 09/19 | Refer to Section 3 of this Chapter |
| 77 | | Type 1 | 75 | 09/20 - 10/14 | Any |
| 77 | | Type 2 | 25 | 09/01 - 09/30 | Any |
| 77 | | Type 6 | 100 | 09/01 - 10/14 | Reduced Price doe/fawn |
| 83 | | ARCH | | 08/15 - 10/08 | Refer to Section 3 of this Chapter |
| 83 | | Type 1 | 125 | 10/09 - 10/31 | Any |
| 83 | | Type 6 | 300 | 08/15 - 10/31 | Reduced Price doe/fawn |
| 110 | | ARCH | | 08/15 - 09/19 | Refer to Section 3 of this Chapter |
| 110 | | Type 1 | 175 | 09/20 - 10/14 | Any |
| 110 | | Type 6 | 175 | 09/20 - 10/14 | Reduced Price doe/fawn |

2011 Harvest by Hunt Area Summary
PR204 - Fifteen Mile Pronghorn

| Area | Type | Active Lic/Htrs | | Buck | Doe | Fawn | Total | Success | | Days/Harv | Days | Licenses Sold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 FIFTEEN MILE | | | | | | | | | | | | |
| | Type 1 | 70 | | 61 | 0 | 0 | 61 | 87.10% | | 3.8 | 232 | 75 |
| | Type 2 | 21 | | 18 | 0 | 0 | 18 | 85.70% | | 2.6 | 46 | 25 |
| | Type 6 | 79 | | 0 | 65 | 9 | 74 | 93.70% | | 2.9 | 217 | 100 |
| Pooled Total | | 144 | (170)* | 79 | 65 | 9 | 153 | 106.20% | (90%)* | 3.2 | 495 | |
| Pooled Resident | | 105 | | 64 | 39 | 5 | 108 | 102.90% | | 3.2 | 349 | |
| Pooled Nonresident | | 39 | | 15 | 26 | 4 | 45 | 115.40% | | 3.2 | 146 | |
| 83 OWL CREEK | | | | | | | | | | | | |
| | Type 1 | 97 | | 72 | 0 | 0 | 72 | 74.20% | | 4.7 | 336 | 128 |
| | Type 6 | 276 | | 0 | 223 | 33 | 256 | 92.80% | | 3.6 | 934 | 300 |
| Pooled Total | | 324 | (373)* | 72 | 223 | 33 | 328 | 101.20% | (87.9%)* | 3.9 | 1270 | |
| Pooled Resident | | 167 | | 53 | 110 | 0 | 163 | 97.60% | | 4.9 | 793 | |
| Pooled Nonresident | | 157 | | 19 | 113 | 33 | 165 | 105.10% | | 2.9 | 477 | |
| 110 SOUTH GREYBULL RIVER | | | | | | | | | | | | |
| | Type 1 | 173 | | 154 | 8 | 0 | 162 | 93.60% | | 2.2 | 350 | 179 |
| | Type 6 | 160 | | 0 | 144 | 9 | 153 | 95.60% | | 2.7 | 407 | 175 |
| Pooled Total | | 276 | (333)* | 154 | 152 | 9 | 315 | 114.10% | (94.6%)* | 2.4 | 757 | |
| Pooled Resident | | 178 | | 117 | 79 | 9 | 205 | 115.20% | | 2.5 | 517 | |
| Pooled Nonresident | | 98 | | 37 | 73 | 0 | 110 | 112.20% | | 2.2 | 240 | |
| 2011 Hunt Area Tota | | 744 | (876)* | 305 | 440 | 51 | 796 | 107.00% | (90.9%)* | 3.2 | 2522 | 982 |
| 2011 Herd Total | | 737 | (876)* | 305 | 440 | 51 | 796 | 108.00% | (90.9%)* | 3.2 | 2522 | 982 |

*Active Licenses

## 2006 - 2011 Harvest Age Structure

for Pronghorn Herd PR204 - FIFTEENMILE

| | Males | | | | | | | | | | Females | | | | | | | | | | Herd |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Juv | 1 | % 1 * | 2 | 3 ^ | % 3 ** | Total Aged ++ | Not Aged +++ | Unk | Total Chkd | Juv | 1 | % 1 * | 2 | 3 ^ | % 3 ** | Total Aged ++ | Not Aged +++ | Unk | Total Chkd | Total |
| 2006 | 1 | 0 | 0% | 1 | 5 | 83% | 7 | 2 | 0 | 9 | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0 | 0 | 9 |
| 2007 | 3 | 1 | 5% | 2 | 17 | 85% | 23 | 1 | 0 | 24 | 1 | 2 | 25% | 1 | 5 | 62% | 9 | 0 | 0 | 9 | 33 |
| 2008 | 0 | 0 | 0% | 1 | 9 | 90% | 10 | 9 | 0 | 19 | 1 | 1 | 11% | 0 | 7 | 88% | 9 | 1 | 1 | 11 | 30 |
| 2009 | 1 | 2 | 11% | 1 | 15 | 83% | 19 | 0 | 0 | 19 | 2 | 0 | 0% | 0 | 12 | 100% | 14 | 0 | 0 | 14 | 33 |
| 2010 | 0 | 1 | 4% | 0 | 19 | 95% | 20 | 7 | 0 | 27 | 3 | 0 | 0% | 3 | 9 | 75% | 15 | 3 | 1 | 19 | 46 |
| 2011 | 0 | 3 | 7% | 7 | 34 | 77% | 44 | 0 | 0 | 44 | 1 | 1 | 4% | 2 | 22 | 88% | 26 | 0 | 8 | 34 | 78 |

* Percent of aged animals (including unaged adults but excluding juveniles) 1 1/2 years old

^ Number of animals three years old and older. Animals aged older than three (excluding unaged adults) are lumped into this three plus category

** Percent of aged animals (not including juveniles or unaged adults) three years old or older

++ includes juveniles

+++ Unaged adults - unaged animals older than yearlings

## 2012 Proposed HUNTING SEASON
## Fifteen Mile Antelope (PR204)

| Hunt Area | Type | Date of Seasons Opens | Closes | Limitations |
|---|---|---|---|---|
| 77 | 1 | Sept. 20 | Oct. 14 | Limited quota; 75 licenses any antelope |
| | 2 | Sept. 1 | Sept. 30 | Limited quota; 25 licenses any antelope valid on private land |
| | 6 | Sept. 1 | Oct 14 | Limited quota; ~~100~~ 50 licenses doe or fawn valid on private land |
| 83 | 1 | ~~Oct. 9~~ Sept. 20 | Oct. 31 | Limited quota; ~~125~~ 150 licenses any antelope |
| | 6 | Aug. 15 | Oct. 31 | Limited quota; 300 licenses doe or fawn valid on or within one-half (1/2) mile of irrigated ~~private~~ land |
| 110 | 1 | Sept. 20 | Oct. 14 | Limited quota; 175 licenses any antelope |
| | 6 | Sept. 20 | Oct. 14 | Limited quota; 175 licenses doe or fawn |

ARCHERY:
77, 83, 110 Aug. 15 Refer to Section 4

Summary of Proposed Changes in License Number

| Area | Type | Change from 2011 |
|---|---|---|
| 77 | 6 | -50 |
| 83 | 1 | +25 |
| **Total PR204** | **1** | **+25** |
| | **6** | **-50** |

### SEASON JUSTIFICATION

There are no proposed changes for hunt area 110. The current season structure allows for optimal buck harvest along with some doe/fawn harvest to control localized population growth. In area 77, it's being proposed to reduce the type 6 quota by 50 licenses since no landowner concerns were heard regarding damage in 2011. However some doe/fawn harvest is still warranted since the potential for damage issues still exist. For area 83, it's proposed to increase the type 1 license quota by 25 to provide more hunter opportunity, and to open the season on Sept. 20 to coincide with area 77 and 110. The Type 6 season limitation in area 83 will change from private land to ½ mile of irrigated land in order to focus harvest on those lands with crop damage issues.

The model is considered reliable since it mimics observed values and is anchored to the 2010 line transect estimate of 4,559 pronghorn. Hunting seasons have and will likely continue to be structured to optimize buck hunting opportunities, with doe/fawn harvest occurring in those areas where private land damage issues persist. The 2012 harvest should be about 750 antelope, including 300 bucks, 400 does and 50 fawns, or approximately 14% of the pre-season population estimate. The 2012 post-season population estimate is 4,600 antelope, or at the objective of 4,600.

Data Set: PR204.GN1 05/17/2012 09:48 am Page 1

2011 15-Mile Pronghorn (PR204)
Data from 2007 to 2012 Simulation from 2007 to 2012

| Age Class | Init Pop. Male | Prop. Female | Presn Male | Mort% Female | Postsn Mort% Male | Mort% Female | Effort Set 1 Male | Effort Set 1 Female | Effort Set 2 Male | Effort Set 2 Female |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1030.0 | 1030.0 | 50.0 | 50.0 | 38.0 | 36.0 | 0.05 | 0.05 | 0.05 | 0.05 |
| 1 | 200.0 | 400.0 | 2.0 | 2.0 | 7.0 | 5.0 | 0.20 | 1.00 | 0.20 | 1.00 |
| 2 | 150.0 | 300.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 3 | 75.0 | 180.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 4 | 50.0 | 150.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 5 | 40.0 | 100.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 6 | 20.0 | 80.0 | 2.0 | 2.0 | 4.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 7 | 10.0 | 60.0 | 2.0 | 2.0 | 5.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 8 | 5.0 | 40.0 | 2.0 | 2.0 | 8.0 | 6.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 9 | 1.0 | 20.0 | 2.0 | 2.0 | 15.0 | 10.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 10 | 0.0 | 10.0 | 2.0 | 2.0 | 30.0 | 20.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 11 | 0.0 | 5.0 | 2.0 | 2.0 | 60.0 | 40.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 12 | 0.0 | 2.0 | 2.0 | 2.0 | 80.0 | 60.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 13 | 0.0 | 1.0 | 2.0 | 2.0 | 100.0 | 100.0 | 1.00 | 1.00 | 1.00 | 1.00 |

Sum = 3959.0 Estimated Sum = 8150 Subadults: Ages 0 to 0

Data Set: PR204.GN1 05/17/2012 09:48 am Page 2

MSI Function is Linear

| Bio-Year | Preseason MSI | Harvest // Des. Pop Size in NA Subadults# | Males# | Females# | Postseason MSI | Effort & Wound Set Used |
|---|---|---|---|---|---|---|
| 2007 | 1.33 | 18 | 165 | 97 | 0.85 | 1 |
| 2008 | 1.25 | 14 | 150 | 126 | 1.00 | 1 |
| 2009 | 1.26 | 34 | 230 | 234 | 1.00 | 1 |
| 2010 | 1.25 | 63 | 300 | 368 | 1.50 | 1 |
| 2011 | 1.40 | 51 | 305 | 440 | 1.10 | 1 |
| 2012 | 1.30 | 50 | 300 | 400 | 1.10 | 1 |
| Set 1 Wounding Loss | | 10.% | 10.% | 10.% | Yearling Male 10.% | |
| Set 1 Wounding Loss | | 10.% | 10.% | 10.% | Yearling Male 10.% | |

Data Set: PR204.GN1 05/17/2012 09:48 am Page 3

| Bio-Year | Young/100 Fems Age 1 - 1 | Young/100 Fems Age 2 - 12 | Young/100 Fems Age 13 - 13 |
|---|---|---|---|
| 2008 | 0.0 | 180.0 | 0.0 |
| 2009 | 0.0 | 180.0 | 0.0 |
| 2010 | 0.0 | 180.0 | 0.0 |
| 2011 | 0.0 | 180.0 | 0.0 |
| 2012 | 0.0 | 180.0 | 0.0 |
| 2013 | 0.0 | 180.0 | 0.0 |

Sex Ratio: 50 : 50

POP-II (V1.2.5) Simulation Output Tables for PR204.GN1, 05/17/2012 09:48 am

Table 1. Population Size During Bio-Year for PR204.GN1 05/17/2012 09:48 am

| Bio-Year | Start | Pre-Season | Post Season | End | %Growth |
|---|---|---|---|---|---|
| 2007 | 8150 | 5226 | 4918 | 4328 | 8.0 |
| 2008 | 8802 | 5898 | 5579 | 4766 | 7.8 |
| 2009 | 9484 | 6392 | 5844 | 4993 | 3.3 |
| 2010 | 9793 | 6668 | 5864 | 4558 | -7.5 |
| 2011 | 9056 | 5780 | 4904 | 4154 | -10.8 |
| 2012 | 8077 | 5419 | 4594 | 3841 | -9.7 |

Table 3. Harvest Mortality for PR204.GN1 05/17/2012 09:48 am

| Bio-Year | Sub-Adults | Adult Males | Adult Females | Total | % of Pop |
|---|---|---|---|---|---|
| 2007 | 18 | 165 | 97 | 280 | 5.4 |
| 2008 | 14 | 150 | 126 | 290 | 4.9 |
| 2009 | 34 | 230 | 234 | 498 | 7.8 |
| 2010 | 63 | 300 | 368 | 731 | 11.0 |
| 2011 | 51 | 305 | 440 | 796 | 13.8 |
| 2012 | 50 | 300 | 400 | 750 | 13.8 |

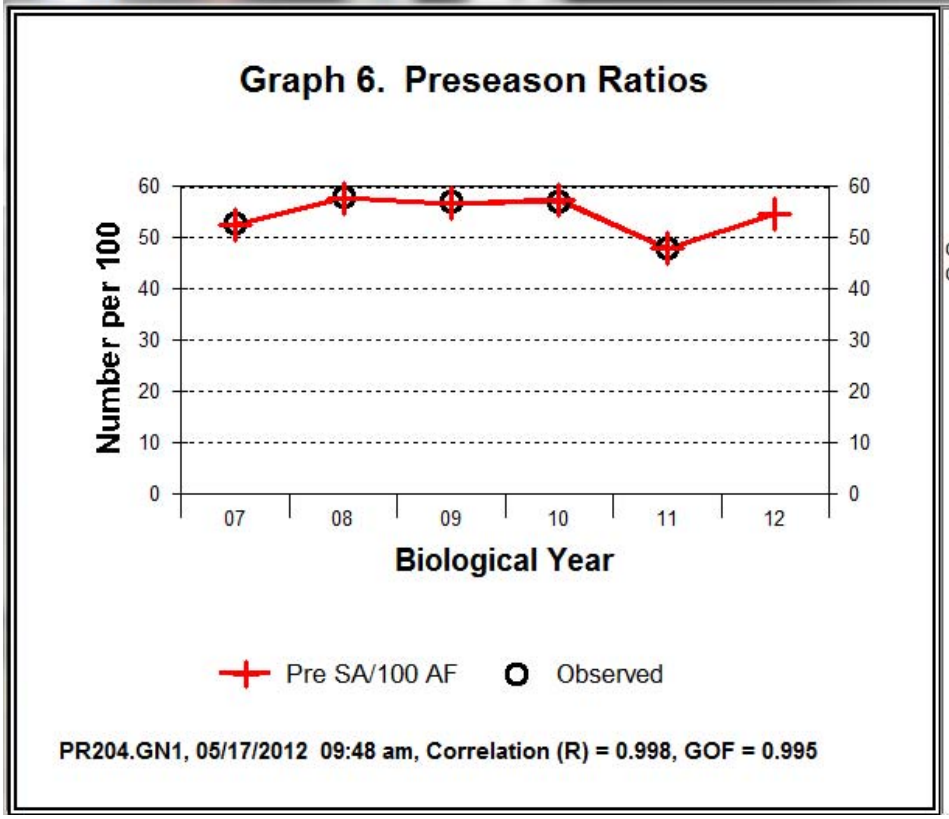
Table 4. Harvest Percentages for PR204.GN1 05/17/2012 09:48 am

| Bio-Year | Sub-Adults | Adult Males | Adult Females | Total | Yearling Males |
|---|---|---|---|---|---|
| 2007 | 1.3 | 14.9 | 3.6 | 5.36 | 10.2 |
| 2008 | 0.8 | 11.4 | 4.3 | 4.92 | 9.7 |
| 2009 | 1.9 | 14.7 | 7.6 | 7.79 | 8.6 |
| 2010 | 3.5 | 17.3 | 11.7 | 10.96 | 7.8 |
| 2011 | 3.8 | 18.9 | 15.6 | 13.77 | 5.5 |
| 2012 | 3.6 | 19.5 | 16.0 | 13.84 | 5.9 |

Table 7. Postseason Ratios for PR204.GN1 05/17/2012 09:48 am

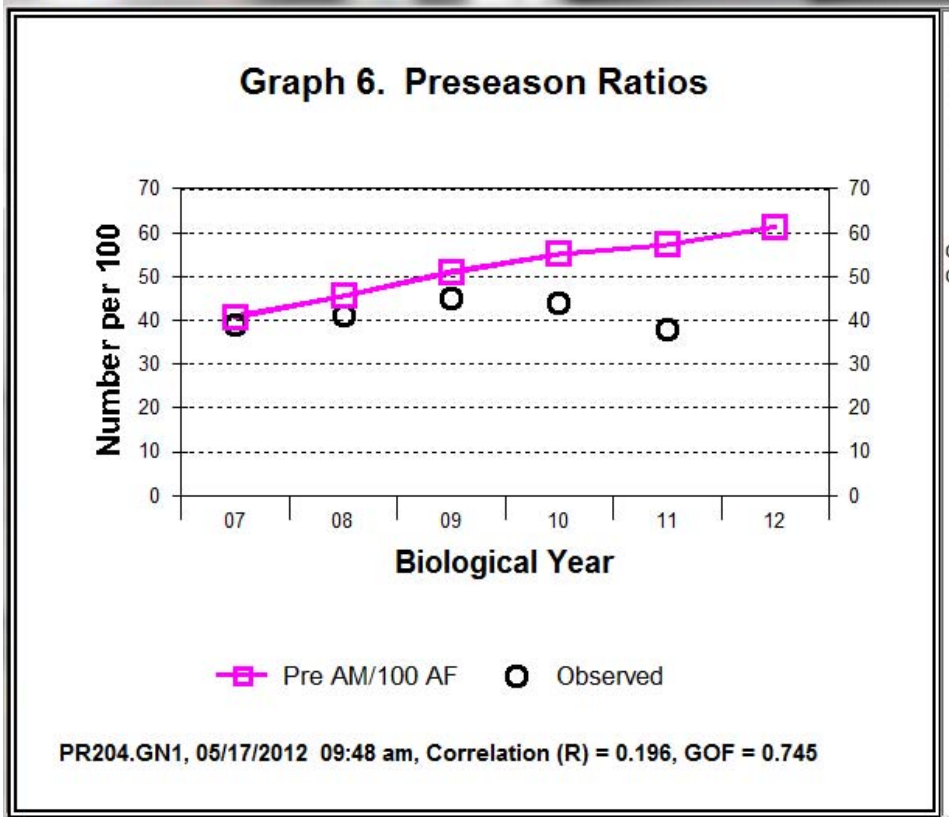
| Bio-Year | Subadults /100 1+F | 2+ Males /100 1+F | Yr. Males /100 1+F | Ad Males /100 1+F |
|---|---|---|---|---|
| 2007 | 54.0 | 20.8 | 14.7 | 35.6 |
| 2008 | 60.2 | 25.7 | 16.2 | 41.9 |
| 2009 | 60.6 | 29.7 | 17.0 | 46.7 |
| 2010 | 63.4 | 33.4 | 18.0 | 51.3 |
| 2011 | 55.4 | 40.1 | 14.7 | 54.8 |
| 2012 | 63.8 | 41.7 | 16.8 | 58.5 |

POP-II (V1.2.5) Graph 6. Preseason Ratios



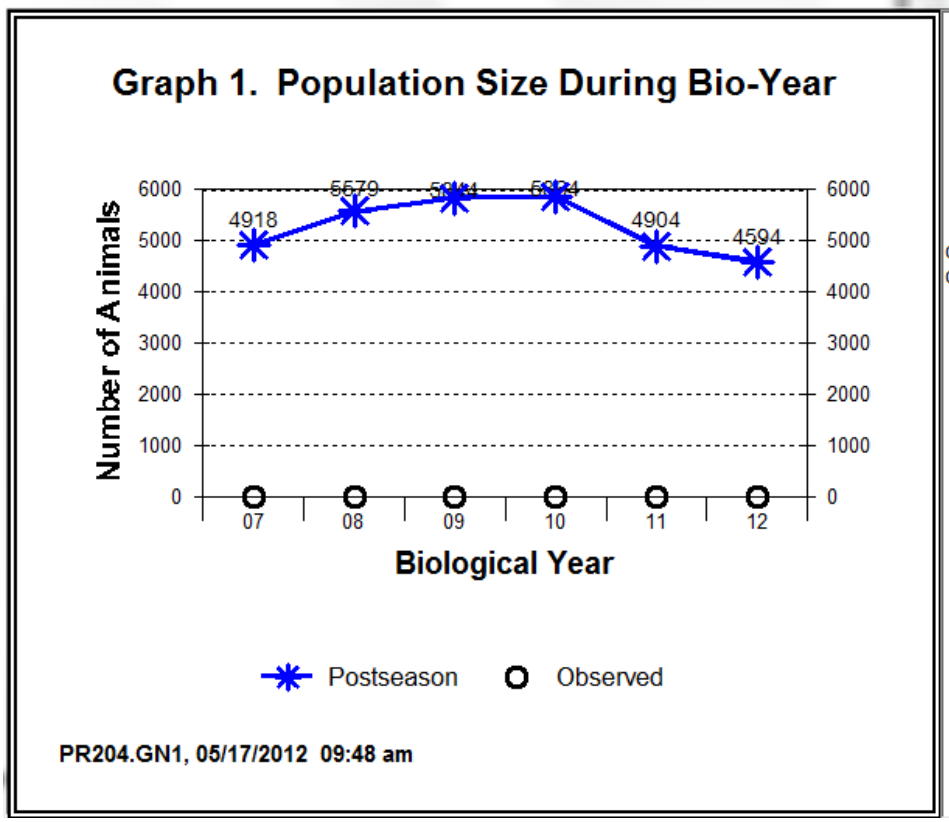

| YR | SIM | OBS |
|---|---|---|
| 07 | 53 | 53 |
| 08 | 58 | 58 |
| 09 | 57 | 57 |
| 10 | 57 | 57 |
| 11 | 48 | 48 |
| 12 | 55 | ----- |
| | AVERAGES | |
| of Col. | 55 | |
| of Pair | 55 | 55 |

POP-II (V1.2.5) Graph 6. Preseason Ratios



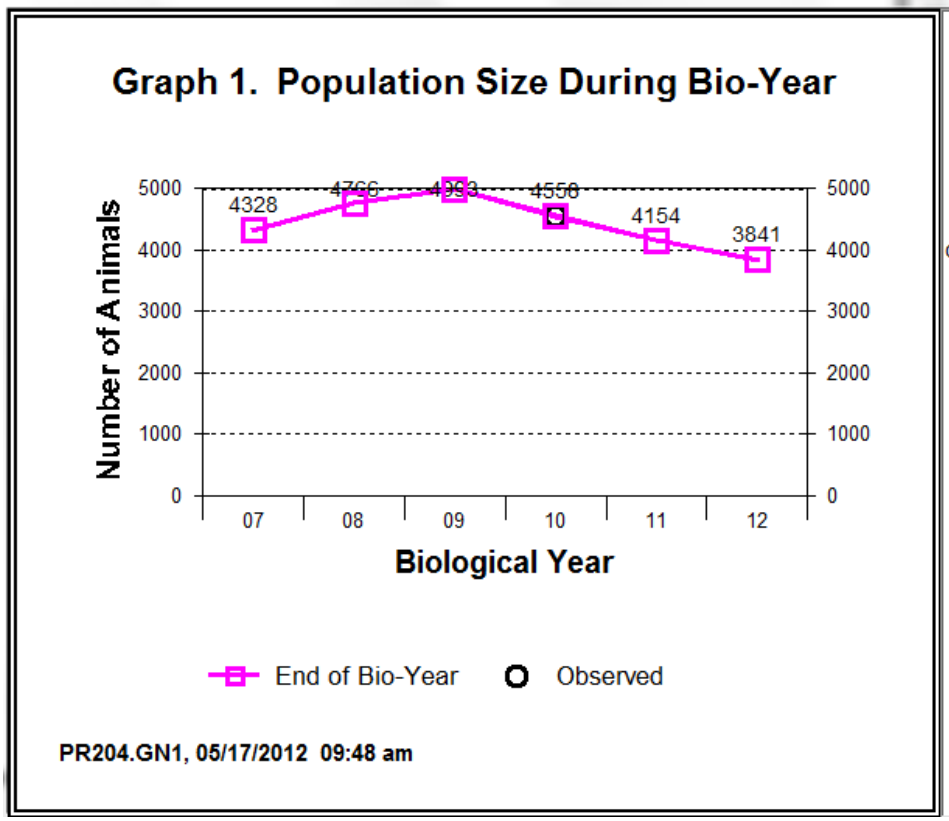

| YR | SIM | OBS |
|---|---|---|
| 07 | 41 | 39 |
| 08 | 46 | 41 |
| 09 | 51 | 45 |
| 10 | 55 | 44 |
| 11 | 57 | 38 |
| 12 | 61 | ----- |
| | AVERAGES | |
| of Col. | 52 | |
| of Pair | 50 | 41 |

POP-II (V1.2.5) Graph 1. Population Size During Bio-Year

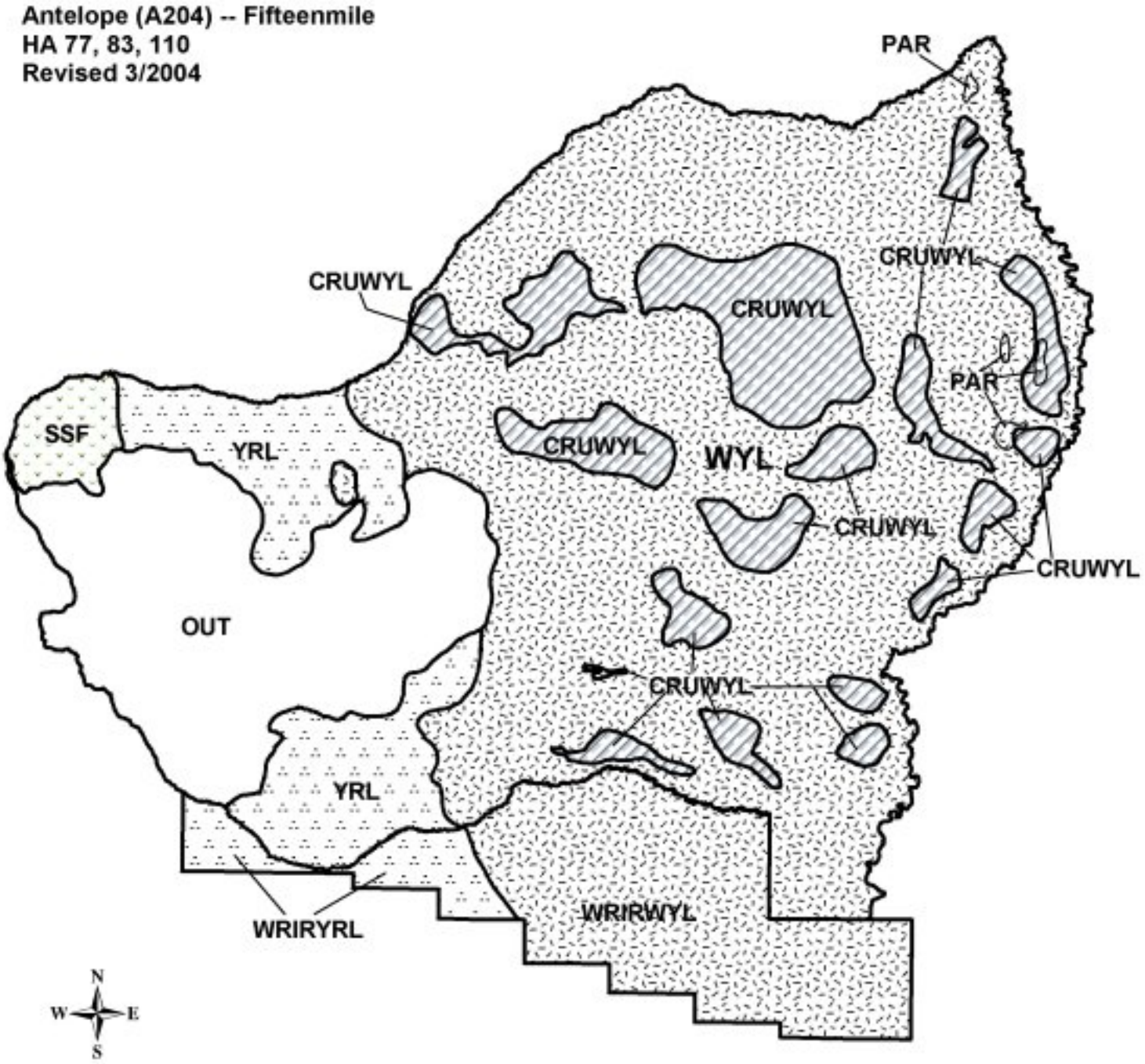



| YR | SIM | OBS |
|---|---|---|
| 07 | 4918 | 0 |
| 08 | 5579 | 0 |
| 09 | 5844 | 0 |
| 10 | 5864 | 0 |
| 11 | 4904 | 0 |
| 12 | 4594 | 0 |
| | AVERAGES | |
| of Col. | 5284 | |
| of Pair | 5284 | 0 |

POP-II (V1.2.5) Graph 1. Population Size During Bio-Year




| YR | SIM | OBS |
|---|---|---|
| 07 | 4328 | ----- |
| 08 | 4766 | ----- |
| 09 | 4993 | ----- |
| 10 | 4558 | 4559 |
| 11 | 4154 | ----- |
| 12 | 3841 | ----- |
| | AVERAGES | |
| of Col. | 4440 | |


Antelope (A204) -- Fifteenmile
HA 77, 83, 110
Revised 3/2004
PAR
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PAR
SSF
YRL
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CRUWYL
CRUWYL
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CRUWYL
YRL
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S

# 2011 - JCR Evaluation Form

SPECIES: Pronghorn | PERIOD: 6/1/2011 - 5/31/2012

HERD: PR205 - CARTER MOUNTAIN

HUNT AREAS: 78, 81, 82 | PREPARED BY: TOM EASTERLY

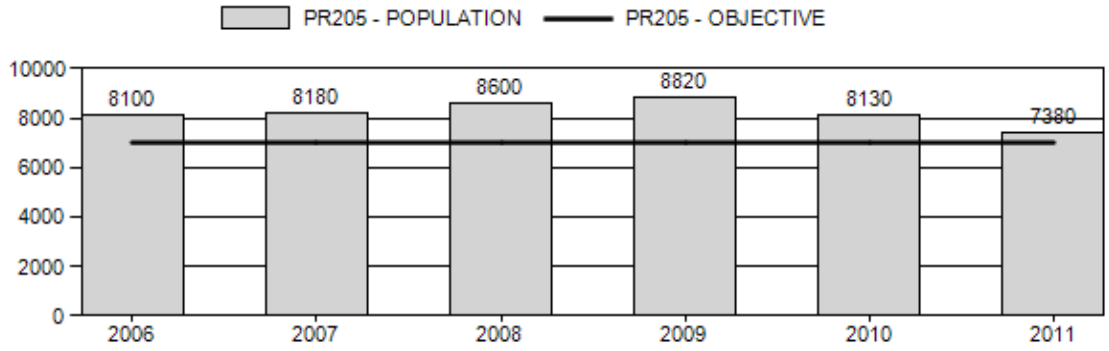
| | 2006 - 2010 Average | 2011 | 2012 Proposed |
|---|---|---|---|
| Population: | 8,366 | 7,380 | 7,750 |
| Harvest: | 299 | 760 | 518 |
| Hunters: | 302 | 717 | 700 |
| Hunter Success: | 99% | 106% | 74% |
| Active Licenses: | 337 | 856 | 800 |
| Active License Percent: | 89% | 89% | 65% |
| Recreation Days: | 1,068 | 2,927 | 1,900 |
| Days Per Animal: | 3.6 | 3.9 | 3.7 |
| Males per 100 Females | 49 | 49 | |
| Juveniles per 100 Females | 54 | 46 | |

| | |
|---|---|
| Population Objective: | 7,000 |
| Management Strategy: | Recreational |
| Percent population is above (+) or below (-) objective: | 5% |
| Number of years population has been + or - objective in recent trend: | 10 |
| Model Date: | 2/26/2012 |

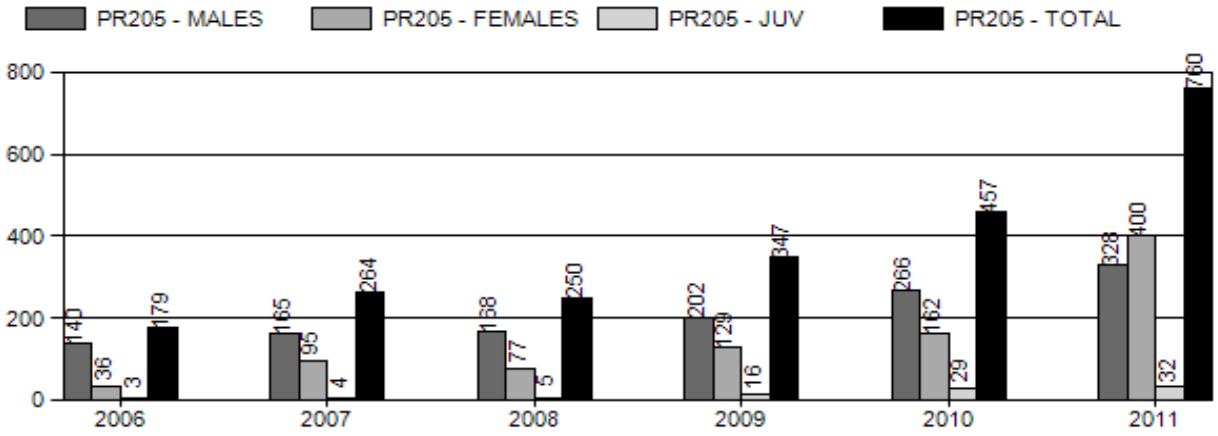
**Proposed harvest rates (percent of pre-season estimate for each sex/age group):**

| | JCR Year | Proposed |
|---|---|---|
| Females ≥ 1 year old: | 10.80% | 5.80% |
| Males ≥ 1 year old: | 11.70% | 11.00% |
| Juveniles (< 1 year old): | 1.90% | 0.80% |
| Total: | 9.30% | 6.20% |
| Proposed change in post-season population: | 9.30% | 6.20% |

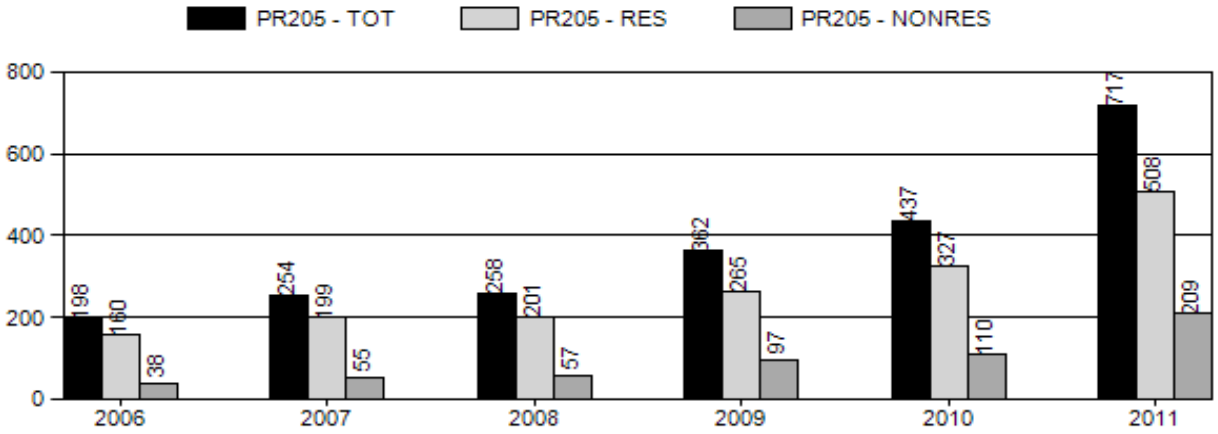
## Population Size - Postseason



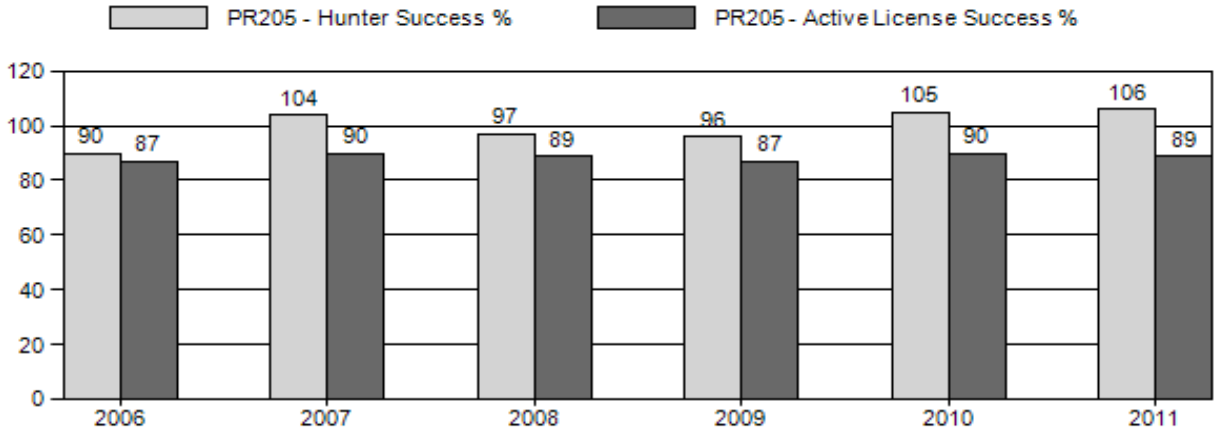
# Harvest



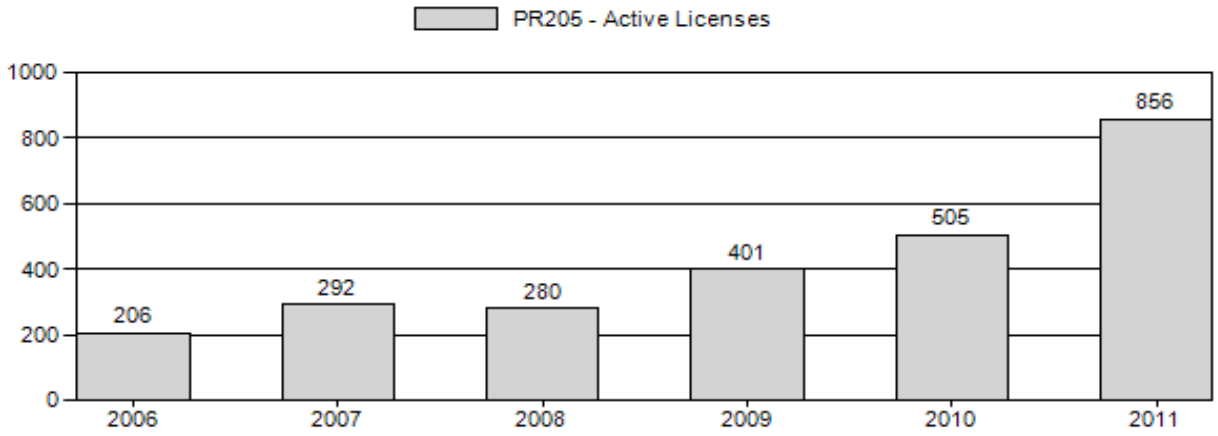

# Number of Hunters



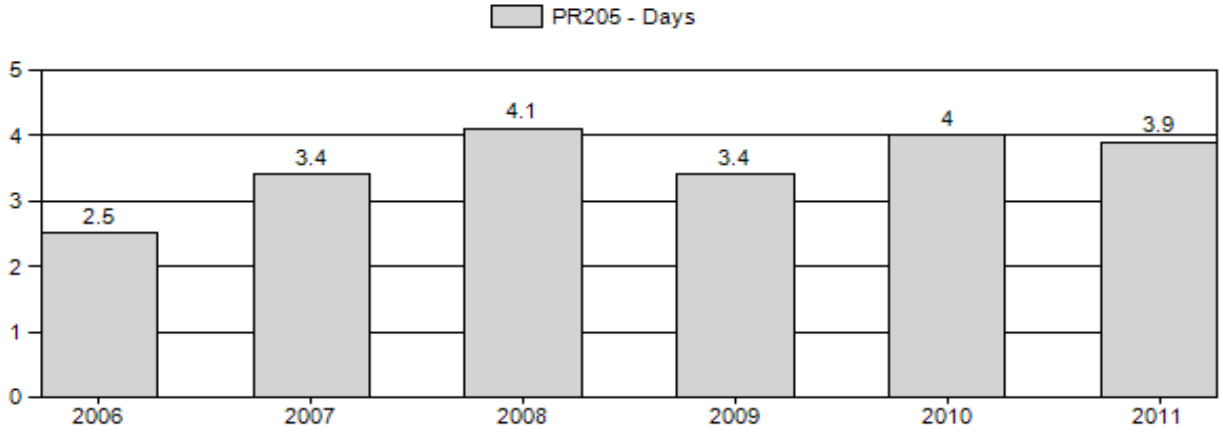

# Harvest Success



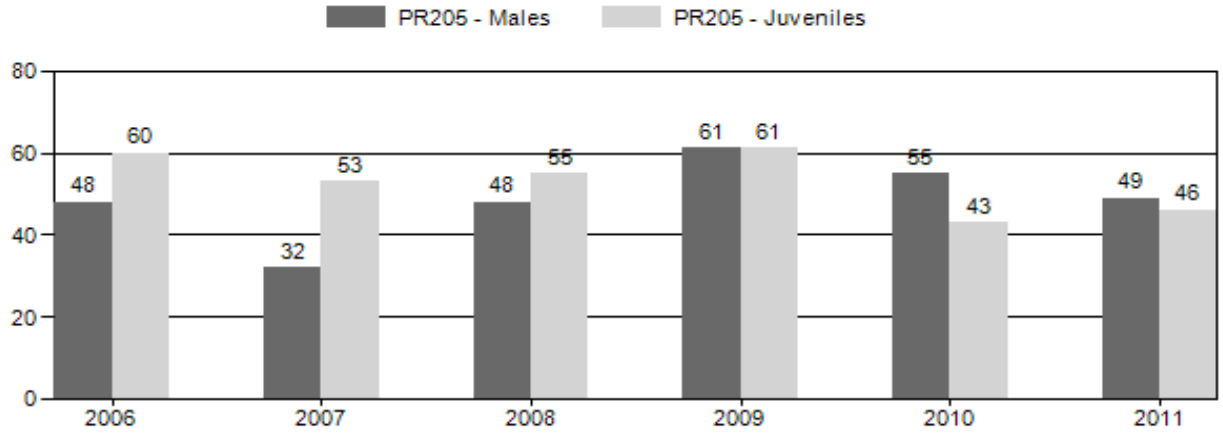
# Active Licenses



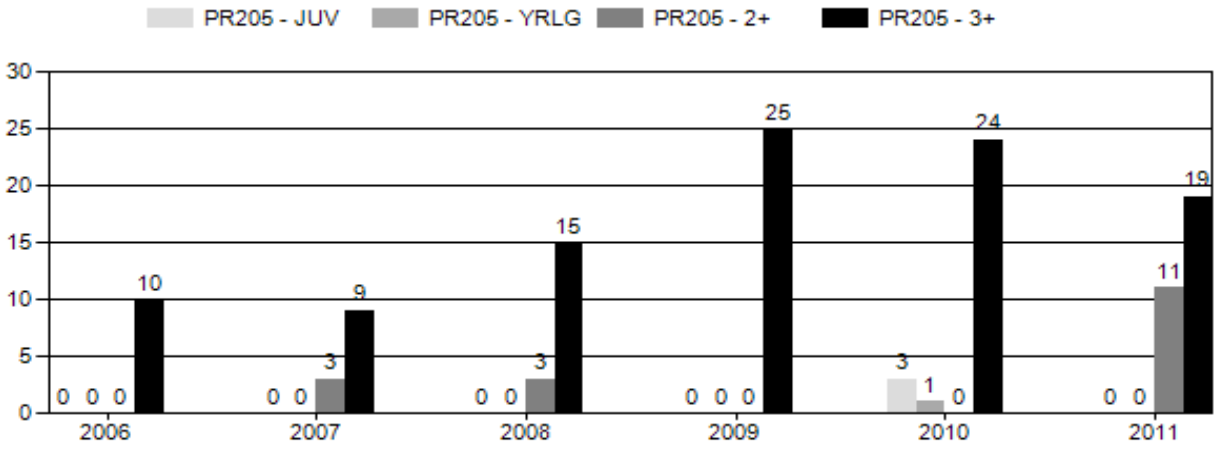

# Days Per Animal Harvested



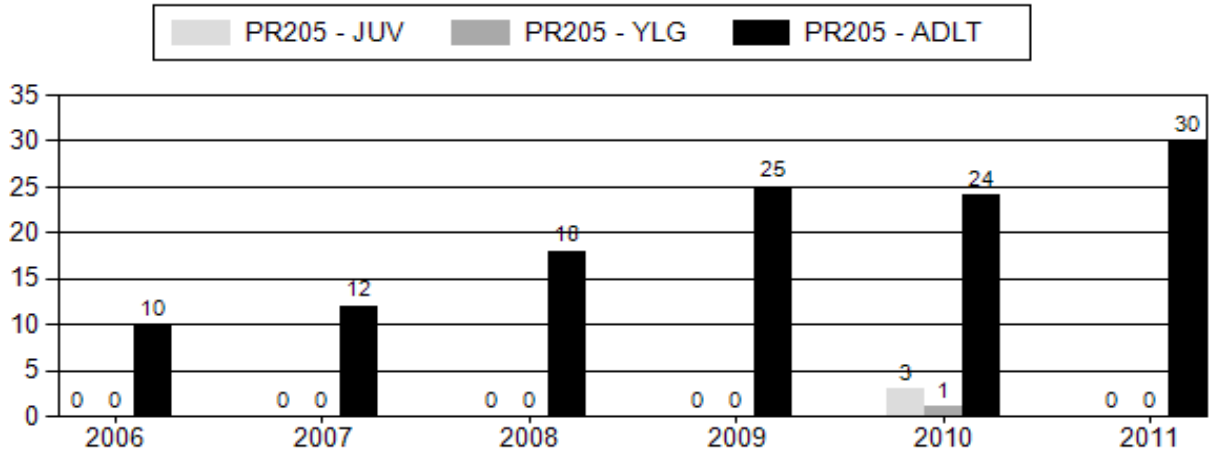

# Preseason Animals per 100 Females



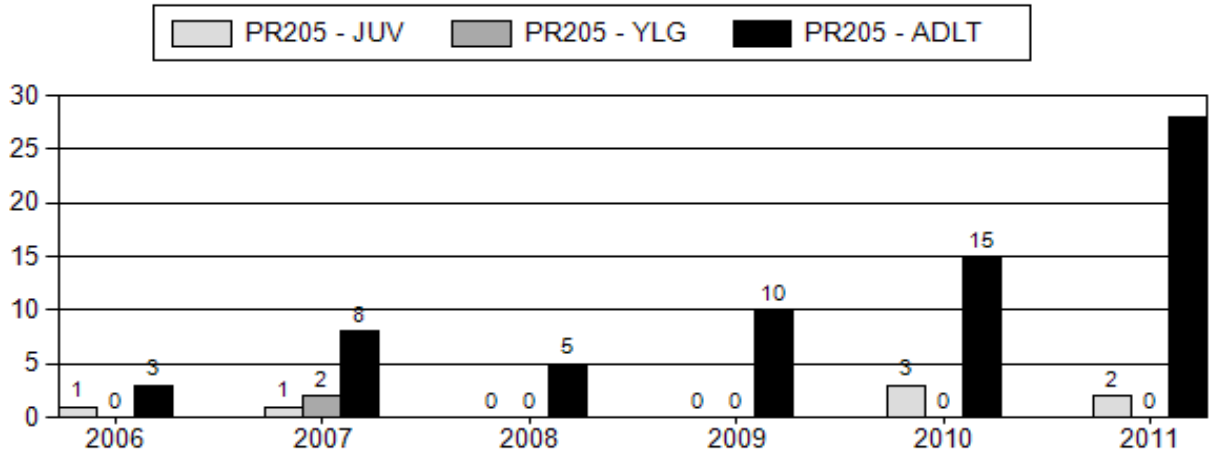
## Age Structure of Field Checked Males




## Age Structure Data (Field and Laboratory) - Male




## Age Structure Data (Field and Laboratory ) - Female



## 2006 - 2011 Preseason Classification Summary

for Pronghorn Herd PR205 - CARTER MOUNTAIN

| Year | MALES | | | | FEMALES | | JUVENILES | | Tot Cls | Cls Obj | Males to 100 Females | | | | Young to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ylg | Adult | Total | % | Total | % | Total | % | | | Ylg | Adult | Total | Conf Int | 100 Fem | Conf Int | 100 Adult |
| 2006 | 124 | 206 | 330 | 23% | 682 | 48% | 407 | 29% | 1,419 | 1,519 | 18 | 30 | 48 | ± 5 | 60 | ± 5 | 40 |
| 2007 | 110 | 174 | 284 | 17% | 895 | 54% | 475 | 29% | 1,654 | 1,243 | 12 | 19 | 32 | ± 3 | 53 | ± 4 | 40 |
| 2008 | 161 | 264 | 425 | 24% | 880 | 49% | 485 | 27% | 1,790 | 1,870 | 18 | 30 | 48 | ± 4 | 55 | ± 5 | 37 |
| 2009 | 156 | 273 | 568 | 28% | 925 | 45% | 568 | 28% | 2,061 | 1,634 | 17 | 30 | 61 | ± 5 | 61 | ± 5 | 38 |
| 2010 | 198 | 410 | 608 | 28% | 1,098 | 50% | 473 | 22% | 2,179 | 1,344 | 18 | 37 | 55 | ± 4 | 43 | ± 3 | 28 |
| 2011 | 115 | 367 | 482 | 25% | 992 | 51% | 458 | 24% | 1,932 | 1,980 | 12 | 37 | 49 | ± 4 | 46 | ± 4 | 31 |

## 2011 - 2011 Preseason Classification by Hunt Area

for Pronghorn Herd PR205 - CARTER MOUNTAIN - Hunt Area ALL

| Year | Area | Males | | | | Females | | Juveniles | | | | Males/100 Females | | | Young/100 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | # Ylg | # Adult | Total Male | % Male | # | % Fem | # | % Juv | Total | Cls Obj | Ylg | Adult | Males | Fem | Adult |
| 2011 | 78 | 30 | 95 | 125 | 22% | 271 | 49% | 160 | 29% | 556 | 1,980 | 11 | 35 | 46 | 59 | 40 |
| | 81 | 38 | 110 | 148 | 26% | 321 | 57% | 95 | 17% | 564 | 1,980 | 12 | 34 | 46 | 30 | 20 |
| | 82 | 47 | 162 | 209 | 26% | 400 | 49% | 203 | 25% | 812 | 1,980 | 12 | 40 | 52 | 51 | 33 |

# 2011 HUNTING SEASONS

PR205 - CARTER MOUNTAIN

| Hunt Area | Add'l Hunt Areas | Type | Quota | Season Dates | Limitations |
|---|---|---|---|---|---|
| 78 | | ARCH | | 08/15 - 09/19 | Refer to Section 3 of this Chapter |
| 78 | | Type 1 | 100 | 09/20 - 10/31 | Any |
| 78 | | Type 6 | 100 | 09/01 - 10/31 | Reduced Price doe/fawn |
| 78 | | Type 7 | 250 | 09/20 - 11/30 | Reduced Price doe/fawn |
| 81 | | ARCH | | 08/15 - 09/30 | Refer to Section 3 of this Chapter |
| 81 | | Type 1 | 25 | 10/01 - 11/15 | Any |
| 81 | | Type 2 | 100 | 11/01 - 11/15 | Any |
| 81 | | Type 6 | 50 | 10/01 - 11/15 | Reduced Price doe/fawn |
| 82 | | ARCH | | 08/15 - 09/19 | Refer to Section 3 of this Chapter |
| 82 | | Type 1 | 150 | 09/20 - 10/14 | Any |
| 82 | | Type 6 | 50 | 09/01 - 10/31 | Reduced Price doe/fawn |
| 82 | | Type 7 | 100 | 09/20 - 10/14 | Reduced Price doe/fawn |

## 2011 Harvest data for Carter Mountain herd unit (PR205)

| Area | Type | Hunters | Active Lic | Buck | Doe | Fawn | Total | Success | | Days/ Harvest | Days | Licenses Sold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 78 McCULLOUGH PEAKS | | | | | | | | | | | | |
| | Type 1 | 96 | | 87 | 2 | 2 | 91 | 94.8% | | 3.0 | 270 | 103 |
| | Type 6 | 92 | | 0 | 74 | 7 | 81 | 88.0% | | 2.7 | 222 | 100 |
| | Type 7 | 230 | | 0 | 170 | 12 | 182 | 79.1% | | 6.5 | 1183 | 250 |
| Pooled Total | | 347 | (418)* | 87 | 246 | 21 | 354 | 102.0% | (84.7%)* | 4.7 | 1675 | |
| Pooled Resident | | 237 | | 68 | 150 | 19 | 237 | 100.0% | | 5.9 | 1392 | |
| Pooled Nonresident | | 110 | | 19 | 96 | 2 | 117 | 106.4% | | 2.4 | 283 | |
| 81 SOUTH FORK | | | | | | | | | | | | |
| | Type 1 | 26 | | 24 | 2 | 0 | 26 | 100.0% | | 2.2 | 57 | 26 |
| | Type 2 | 95 | | 88 | 5 | 0 | 93 | 97.9% | | 3.5 | 324 | 100 |
| | Type 6 | 38 | | 0 | 30 | 4 | 34 | 89.5% | | 3.4 | 114 | 50 |
| Pooled Total | | 150 | (159)* | 112 | 37 | 4 | 153 | 102.0% | (96.2%)* | 3.2 | 495 | |
| Pooled Resident | | 118 | | 89 | 31 | 0 | 120 | 101.7% | | 3.7 | 443 | |
| Pooled Nonresident | | 32 | | 23 | 6 | 4 | 33 | 103.1% | | 1.6 | 52 | |
| 82 NORTH GREYBULL RIVER | | | | | | | | | | | | |
| | Type 1 | 142 | | 129 | 0 | 0 | 129 | 90.8% | | 3.0 | 384 | 151 |
| | Type 6 | 39 | | 0 | 28 | 0 | 28 | 71.8% | | 4.1 | 114 | 50 |
| | Type 7 | 98 | | 0 | 89 | 7 | 96 | 98.0% | | 2.7 | 259 | 98 |
| Pooled Total | | 228 | (279)* | 129 | 117 | 7 | 253 | 111.0% | (90.7%)* | 3.0 | 757 | |
| Pooled Resident | | 160 | | 101 | 58 | 5 | 164 | 102.5% | | 3.4 | 556 | |
| Pooled Nonresident | | 68 | | 28 | 59 | 2 | 89 | 130.9% | | 2.3 | 201 | |
| 2011 Hunt Area Total | | 725 | (856)* | 328 | 400 | 32 | 760 | 104.8% | (88.8%)* | 3.9 | 2927 | 928 |
| 2011 Herd Total | | 717 | (856)* | 328 | 400 | 32 | 760 | 106.0% | (88.8%)* | 3.9 | 2927 | 928 |

*Active Licenses

## 2006 - 2011 Harvest Summary
for Pronghorn Herd PR205 - CARTER MOUNTAIN

| Year | HUNTERS | | | | | HARVEST | | | | | | | | | SUCCESS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Res Htrs | NRes Htrs | % NRes | Total Htrs | Act Lic | Ylg Male | Adult Male | Total Male | % Male | Fem | % Fem | Juv | % Juv | Tot Harv | Hntrs | Act Lic | Hntr Days | Days to Harv |
| 2006 | 160 | 38 | 19% | 198 | 206 | 0 | 140 | 140 | 78% | 36 | 20% | 3 | 2% | 179 | 90% | 87% | 448 | 2.5 |
| 2007 | 199 | 55 | 22% | 254 | 292 | 0 | 165 | 165 | 62% | 95 | 36% | 4 | 2% | 264 | 104% | 90% | 896 | 3.4 |
| 2008 | 201 | 57 | 22% | 258 | 280 | 0 | 168 | 168 | 67% | 77 | 31% | 5 | 2% | 250 | 97% | 89% | 1,021 | 4.1 |
| 2009 | 265 | 97 | 27% | 362 | 401 | 0 | 202 | 202 | 58% | 129 | 37% | 16 | 5% | 347 | 96% | 87% | 1,166 | 3.4 |
| 2010 | 327 | 110 | 25% | 437 | 505 | 0 | 266 | 266 | 58% | 162 | 35% | 29 | 6% | 457 | 105% | 90% | 1,807 | 4 |
| 2011 | 508 | 209 | 29% | 717 | 856 | 0 | 328 | 328 | 43% | 400 | 53% | 32 | 4% | 760 | 106% | 89% | 2,927 | 3.9 |

## 2006 - 2011 Harvest Age Structure
for Pronghorn Herd PR205 - CARTER MOUNTAIN

| Year | Males | | | | | | | | | | Females | | | | | | | | | | Herd Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Juv | 1 | %1 * | 2 ^ | 3 ^ | %3 ** | Tot Aged ++ | Not Aged +++ | Unk | Tot Chkd | Juv | 1 | %1 * | 2 ^ | 3 ^ | %3 ** | Tot Aged ++ | Not Aged +++ | Unk | Tot Chkd | |
| 2006 | 0 | 0 | 0% | 0 | 6 | 100% | 6 | 4 | 0 | 10 | 1 | 0 | 0% | 0 | 3 | 100% | 4 | 0 | 0 | 4 | 14 |
| 2007 | 0 | 0 | 0% | 3 | 8 | 73% | 11 | 1 | 0 | 12 | 1 | 2 | 20% | 1 | 4 | 57% | 8 | 3 | 0 | 11 | 23 |
| 2008 | 0 | 0 | 0% | 3 | 15 | 83% | 18 | 0 | 1 | 19 | 0 | 0 | 0% | 1 | 2 | 67% | 3 | 2 | 0 | 5 | 24 |
| 2009 | 0 | 0 | 0% | 0 | 25 | 100% | 25 | 0 | 0 | 25 | 0 | 0 | 0% | 2 | 8 | 80% | 10 | 0 | 1 | 11 | 36 |
| 2010 | 3 | 1 | 4% | 0 | 16 | 94% | 20 | 8 | 0 | 28 | 3 | 0 | 0% | 1 | 5 | 83% | 9 | 9 | 2 | 20 | 48 |
| 2011 | 0 | 0 | 0% | 11 | 19 | 63% | 30 | 0 | 0 | 30 | 2 | 0 | 0% | 11 | 17 | 61% | 30 | 0 | 8 | 38 | 68 |

* Percent of aged animals (including unaged adults but excluding juveniles) 1 1/2 years old

^ Number of animals three years old and older. Animals aged older than three (excluding unaged adults) are lumped into this three plus category

** Percent of aged animals (not including juveniles or unaged adults) three years old or older

++ includes juveniles

+++ Unaged adults - unaged animals older than yearlings

## PR205 - CARTER MOUNTAIN Pronghorn Line-Transect Summary

| Biological Year: | 2003 | 2006 | 2009 |
|---|---|---|---|
| **Survey Dates:** | 5/21-24/2004 | 5/16-17/2007 | 6/2-6/2009 |
| **Survey Cost:** | $3,853 | $2,871 | $4,488 |
| **Flight Service:** | SKY AVIATION | SKY AVIATION | SKY AVIATION |
| **Flight (Mission) Time:** | 13 | 17.4 | 19.5 |
| **Aircraft:** | Cessna 185 | Scout | Scout |
| **Observers:** | Easterly, Fagan, Lentsch | Easterly | Easterly |
| **Weather Conditions:** | | | |
| **Temperature ($^{o}$F):** | 50-70 | 50-60 | |
| **Cloud Cover (%):** | 20-50 | 0-20 | 0-80 |
| **Wind Speed (MPH):** | 11.5-23.0 | 0-0 | 0 - 25 |
| **Transect Limits:** | 108 10.0 to 109 15.3 | 108 10.0 to 109 28.0 | 108 10.0 to 109 29.0 |
| **Transect Direction*:** | North/South | North/South | North/South |
| **Transect Interval (Minutes of Longitude):** | 1.5 | 1.5 | 1.5 |
| **Transect Length: (Mi.):** | 1,211 | 1,787 | 1,160 |
| **Transect Altitude (AGL):** | 330 | 295 | 291 |
| **Number of Individuals Observed:** | 569 | 476 | 498 |
| **Number of Groups Observed:** | 263 | 212 | 264 |
| **Average Group Size:** | 2.2 | 2.2 | 1.9 |
| **Occupied Habitat (mi$^2$):** | 1,450 | 1,695 | 1,695 |
| **Density Estimate (Animals/mi$^2$ with Confidence Intervals)**:** | 1.76 (1.05 - 2.96) | 6.8 (4.6 - 10.1) | 8.45 (5.6 - 12.7) |
| **Population Estimate (with Confidence Intervals)**:** | 2,554 (1,519 - 4,295) | 9,433 (6,371 - 13,967) | 12,008 (7,973 - 18,084) |

* Not all transects flown North-South due to topography along North and South Forks of Shoshone River.

** 2003 survey data analyzed with 2 observers; 2006 and 2009 data analyzed with 1 observer.

## 2012 Proposed HUNTING SEASONS
## Carter Mountain Pronghorn Antelope Herd Unit (PR205)

| HUNT AREA | TYPE | Season Dates OPENS | CLOSES | LIMITATIONS |
|---|---|---|---|---|
| 78 | 1 | Sep. 20 | Oct. 31 | Limited Quota; ~~100~~ **125** licenses any antelope |
| | 6 | Sep. 1 | Oct 31 | Limited Quota; ~~100~~ **50** licenses doe or fawn |
| | 7 | Sep. ~~20~~ **1** | Nov 30 | Limited Quota; 250 licenses doe or fawn valid in that portion of Area 78 in the Shoshone River drainage |
| 81 | 1 | Oct. 1 | Nov. 15 | Limited Quota; 25 licenses any antelope ~~valid in that portion of Area 81 east of Wyoming Highway 120~~ |
| | 2 | ~~Nov. 1~~ **Oct 1** | Nov. 15 | Limited Quota; 100 licenses any antelope |
| | 6 | Oct. 1 | Nov. 15 | Limited Quota; 50 licenses doe or fawn valid in that portion of Area 81 west of Wyoming Highway 120 |
| 82 | 1 | Sept. 20 | Oct. 14 | Limited Quota; 150 licenses any antelope |
| | 6 | ~~Sept 1~~ **Aug 15** | Oct. 31 | Limited Quota; 50 licenses doe or fawn valid in that portion of Area 82 on private land east of Wyoming Highway 120 |
| | 7 | Sept. 20 | Oct. 14 | Limited Quota; 100 licenses doe or fawn valid in that portion of Area 82 west of Wyoming Highway 120 |

### Summary of proposed changes:

| Hunt Area | Type | Change from 2011 |
|---|---|---|
| 78 | 1 | Increase by 25 licenses |
| | 6 | Decreased by 50 licenses |
| 81 | 1 | Removed restriction to east of Hwy 120 |
| | 2 | Opening date changed; one month earlier |
| 82 | 6 | Opening date changed; 15 days earlier |

### JUSTIFICATION

We proposed to provide more opportunity to harvest antelope in these areas. Type 1 (any antelope) licenses in Areas 78 are proposed to increase by 25 licenses. However, fewer Type 6 (doe/fawn) licenses in Area 78 will be offered. The Area 81 Type 6 licenses were not previously advertised in the application packet but are needed to address crop depredation. The season for Area 82 Type 6 license is proposed to be

lengthened by 15 days; opening August 15 instead of September 1, again to address crop depredation concerns. Type 1 and Type 2 licenses have been issued in past years for Area 81 and both were advertised in the 2012 application booklet. Type 1s opened early (Oct 1) but were restricted to east of Highway 120; Type 2s were valid for the entire hunt area, but opened November 1. For several years, hunters have been requesting an opportunity to hunt antelope earlier west of Highway 120. The major landowner in that area (Hoodoo Ranch) now has the opportunity to restrict access to the ranch through limitations imposed through the access program (Hunter Management Area). We proposed to make Type 1s valid area wide and the Type 2s to open October 1. Public lands and other private land (with landowner permission) in the Hunt Area will be open for hunting. We will consolidate those license types for the 2013 hunting season.

We have concerns with population estimates produced by Distance analysis of line transect data. The population estimate tripled following conversion from two observers to one observer during line transects. The POP-II model was adjusted upwards but not to the extent suggested by line transect/Distance. The model simulates observed field data. The population objective will be reviewed following development of adequate spreadsheet models.

Data Set: A205.GN1 02/26/2012 11:07 am Page 1

Carter Mountain herd unit
Data from 2005 to 2012 Simulation from 2005 to 2012

| Age Class | Init Pop Male | Prop Female | Presn Male | Mort% Female | Postsn Mort% Male | Female | Effort Set1 Male | Effort Set1 Female | Effort Set2 Male | Effort Set2 Female |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 2042 | 2042 | 50.0 | 50.0 | 30.0 | 30.0 | 0.20 | 0.20 | 0.20 | 0.20 |
| 1 | 302 | 370 | 2.0 | 2.0 | 6.0 | 4.0 | 0.50 | 1.00 | 0.10 | 1.00 |
| 2 | 259 | 331 | 2.0 | 2.0 | 6.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 3 | 113 | 239 | 2.0 | 2.0 | 6.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 4 | 107 | 252 | 2.0 | 2.0 | 6.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 5 | 84 | 320 | 2.0 | 2.0 | 10.0 | 4.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 6 | 84 | 374 | 2.0 | 2.0 | 20.0 | 10.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 7 | 42 | 317 | 2.0 | 2.0 | 35.0 | 20.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 8 | 14 | 190 | 2.0 | 2.0 | 50.0 | 35.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 9 | 10 | 181 | 2.0 | 2.0 | 70.0 | 50.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 10 | 1 | 51 | 2.0 | 2.0 | 85.0 | 70.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 11 | 0 | 13 | 2.0 | 2.0 | 90.0 | 90.0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 12 | 0 | 2 | 2.0 | 2.0 | 100.0 | 100.0 | 1.00 | 1.00 | 1.00 | 1.00 |

Sum = 7740.0 Estimated Sum = 12000 Subadults: Ages 0 to 0

Data Set: A205.GN1 02/26/2012 11:07 am Page 2

MSI Function is Linear

| Bio-Year | Preseason MSI | Harvest // Des. Pop Size in NA Subadults# | Males# | Females# | Postseason MSI | Effort & Wound Set Used |
|---|---|---|---|---|---|---|
| 2005 | 1.38 | 0 | 131 | 4 | 1.00 | 2 |
| 2006 | 1.22 | 3 | 140 | 36 | 1.10 | 2 |
| 2007 | 1.29 | 4 | 165 | 95 | 1.00 | 2 |
| 2008 | 1.28 | 5 | 168 | 78 | 1.20 | 2 |
| 2009 | 1.20 | 16 | 202 | 129 | 1.25 | 2 |
| 2010 | 1.43 | 29 | 266 | 162 | 1.30 | 2 |
| 2011 | 1.43 | 32 | 328 | 400 | 1.00 | 2 |
| 2012 | 1.20 | 18 | 300 | 200 | 1.00 | 2 |

Set 1 Wounding Loss 10.% 10.% 10.% Yearling Male 10.%
Set 1 Wounding Loss 10.% 10.% 10.% Yearling Male 10.%

| Bio-Year | Young/100 Fems Age 1 - 1 | Young/100 Fems Age 2 - 11 | Young/100 Fems Age 12 - 12 | Sex Ratio: 50 : 50 |
|---|---|---|---|---|
| 2006 | 0.0 | 180.0 | 0.0 | |
| 2007 | 0.0 | 180.0 | 0.0 | |
| 2008 | 0.0 | 180.0 | 0.0 | |
| 2009 | 0.0 | 180.0 | 0.0 | |
| 2010 | 0.0 | 180.0 | 0.0 | |
| 2011 | 0.0 | 180.0 | 0.0 | |
| 2012 | 0.0 | 180.0 | 0.0 | |
| 2013 | 0.0 | 180.0 | 0.0 | |

POP-II (V1.2.5) Simulation Output Tables for A205.GN1, 02/26/2012 11:07am

Table 1. Population Size During Bio-Year for A205.GN1 02/26/2012 11:07am

| Bio-Year | Start | Pre-Season | Post Season | End | %Growth |
|---|---|---|---|---|---|
| 2005 | 12000 | 7475 | 7326 | 6047 | 1.7 |
| 2006 | 12203 | 8300 | 8103 | 6506 | 2.6 |
| 2007 | 12524 | 8475 | 8184 | 6834 | 3.6 |
| 2008 | 12970 | 8868 | 8592 | 6948 | 0.3 |
| 2009 | 13008 | 9205 | 8824 | 7131 | 0.7 |
| 2010 | 13103 | 8629 | 8126 | 6705 | -3.3 |
| 2011 | 12667 | 8212 | 7376 | 6336 | -7.8 |
| 2012 | 11676 | 8320 | 7750 | 6520 | 0.7 |

Table 3. Harvest Mortality for A205.GN1 02/26/2012 11:07 am

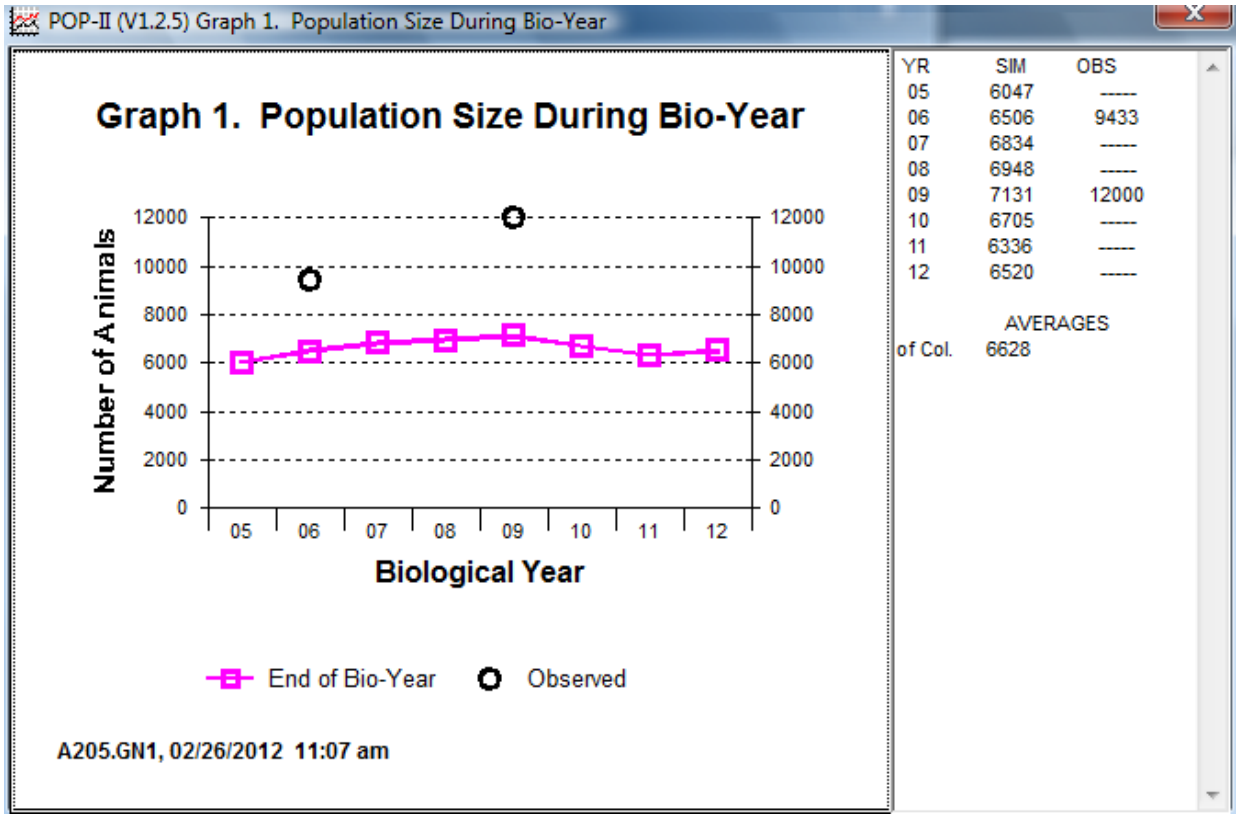
| Bio-Year | Sub-Adults | Adult Males | Adult Females | % of Total | Pop |
|---|---|---|---|---|---|
| 2005 | 0 | 131 | 4 | 135 | 1.8 |
| 2006 | 3 | 140 | 36 | 179 | 2.2 |
| 2007 | 4 | 165 | 95 | 264 | 3.1 |
| 2008 | 5 | 168 | 78 | 251 | 2.8 |
| 2009 | 16 | 202 | 129 | 347 | 3.8 |
| 2010 | 29 | 266 | 162 | 457 | 5.3 |
| 2011 | 32 | 328 | 400 | 760 | 9.3 |
| 2012 | 18 | 300 | 200 | 518 | 6.2 |

Table 4. Harvest Percentages for A205.GN1 02/26/2012 11:07 am

| Bio-Year | Sub-Adults | Adult Males | Adult Females | Total | Yearling Males |
|---|---|---|---|---|---|
| 2005 | 0.0 | 8.6 | 0.1 | 1.81 | 4.1 |
| 2006 | 0.1 | 7.4 | 0.9 | 2.16 | 5.2 |
| 2007 | 0.2 | 7.2 | 2.4 | 3.12 | 4.9 |
| 2008 | 0.2 | 6.4 | 1.9 | 2.83 | 3.7 |
| 2009 | 0.7 | 7.2 | 3.2 | 3.77 | 3.1 |
| 2010 | 1.7 | 8.9 | 4.1 | 5.30 | 3.2 |
| 2011 | 1.9 | 11.7 | 10.8 | 9.25 | 2.1 |
| 2012 | 0.8 | 11.0 | 5.8 | 6.23 | 2.6 |

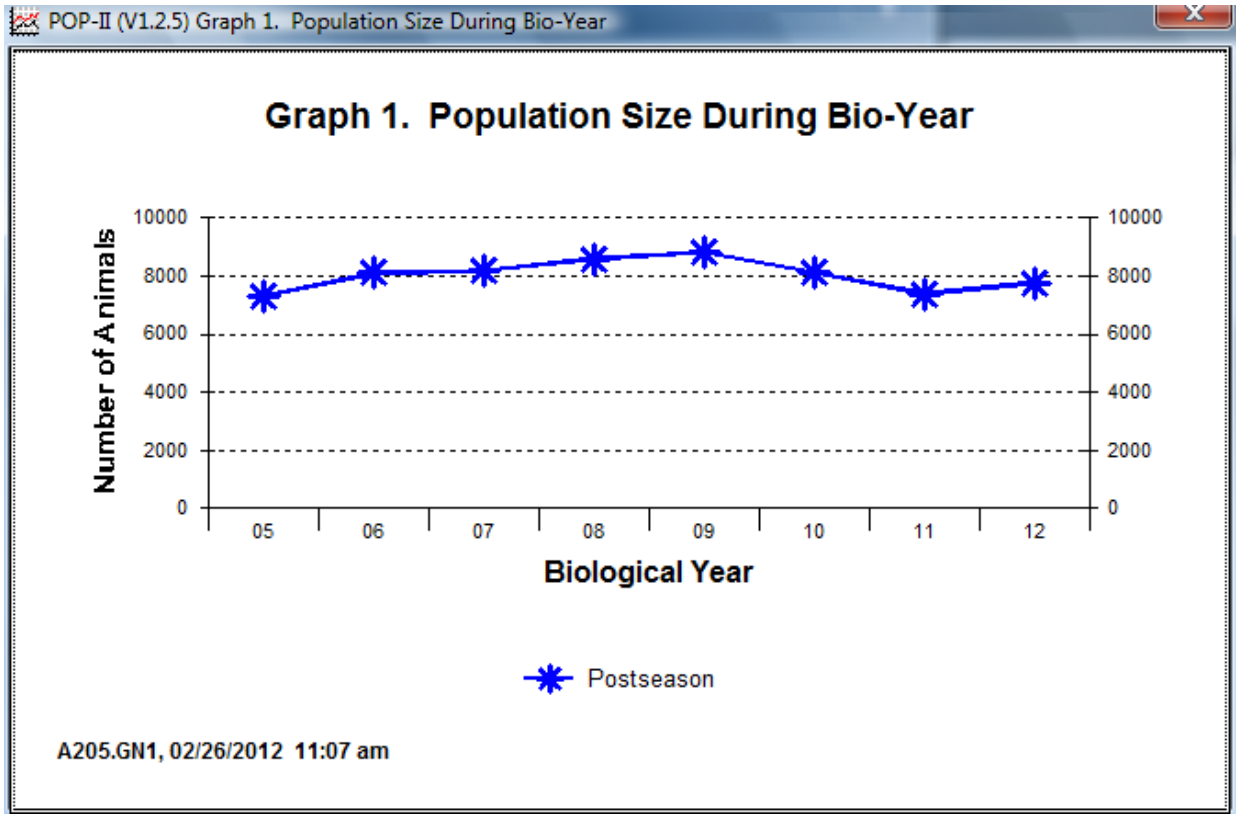
Table 6. Preseason Ratios for A205.GN1 02/26/2012 11:07 am

| Bio-Year | Subadults /100 1+F | 2+ Males /100 1+F | Yr. Males /100 1+F | Ad Males /100 1+F |
|---|---|---|---|---|
| 2005 | 49.3 | 27.0 | 11.4 | 38.5 |
| 2006 | 59.9 | 30.4 | 16.7 | 47.2 |
| 2007 | 52.9 | 37.5 | 19.4 | 56.9 |
| 2008 | 54.5 | 46.4 | 17.9 | 64.4 |
| 2009 | 61.0 | 53.3 | 17.3 | 70.7 |
| 2010 | 43.1 | 56.7 | 18.5 | 75.2 |
| 2011 | 45.8 | 62.1 | 13.3 | 75.4 |
| 2012 | 61.7 | 62.1 | 16.4 | 78.5 |

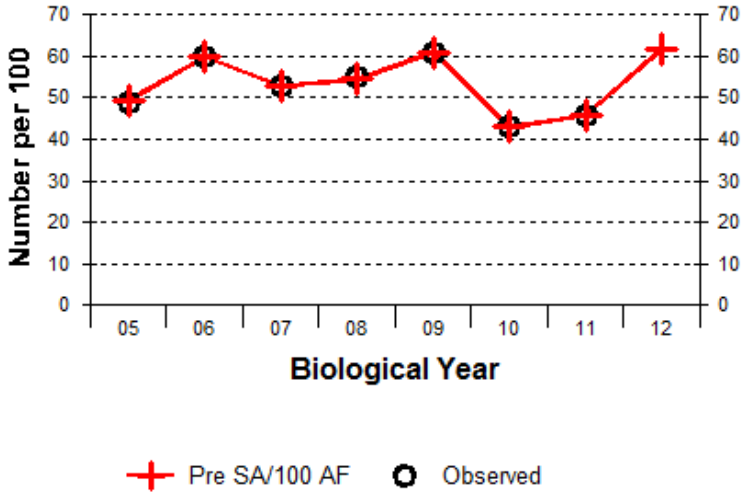



| YR | SIM | OBS |
|---|---|---|
| 05 | 6047 | ----- |
| 06 | 6506 | 9433 |
| 07 | 6834 | ----- |
| 08 | 6948 | ----- |
| 09 | 7131 | 12000 |
| 10 | 6705 | ----- |
| 11 | 6336 | ----- |
| 12 | 6520 | ----- |

AVERAGES
of Col. 6628



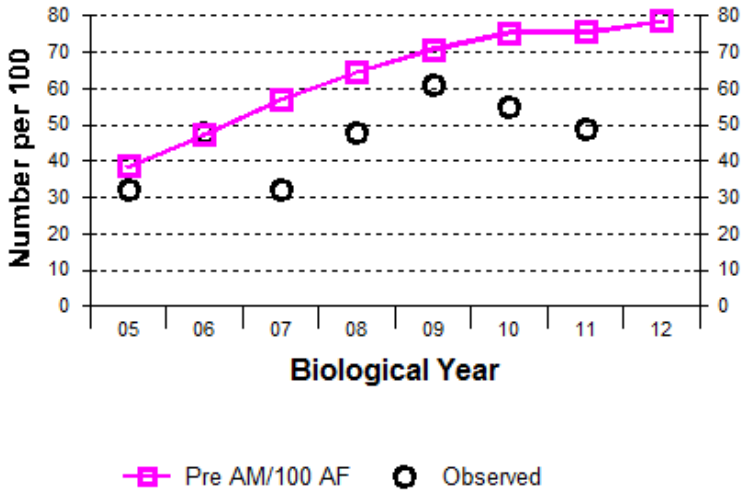
POP-II (V1.2.5) Graph 6. Preseason Ratios




A205.GN1, 02/26/2012 11:07 am, Correlation (R) = 0.999, GOF = 0.995

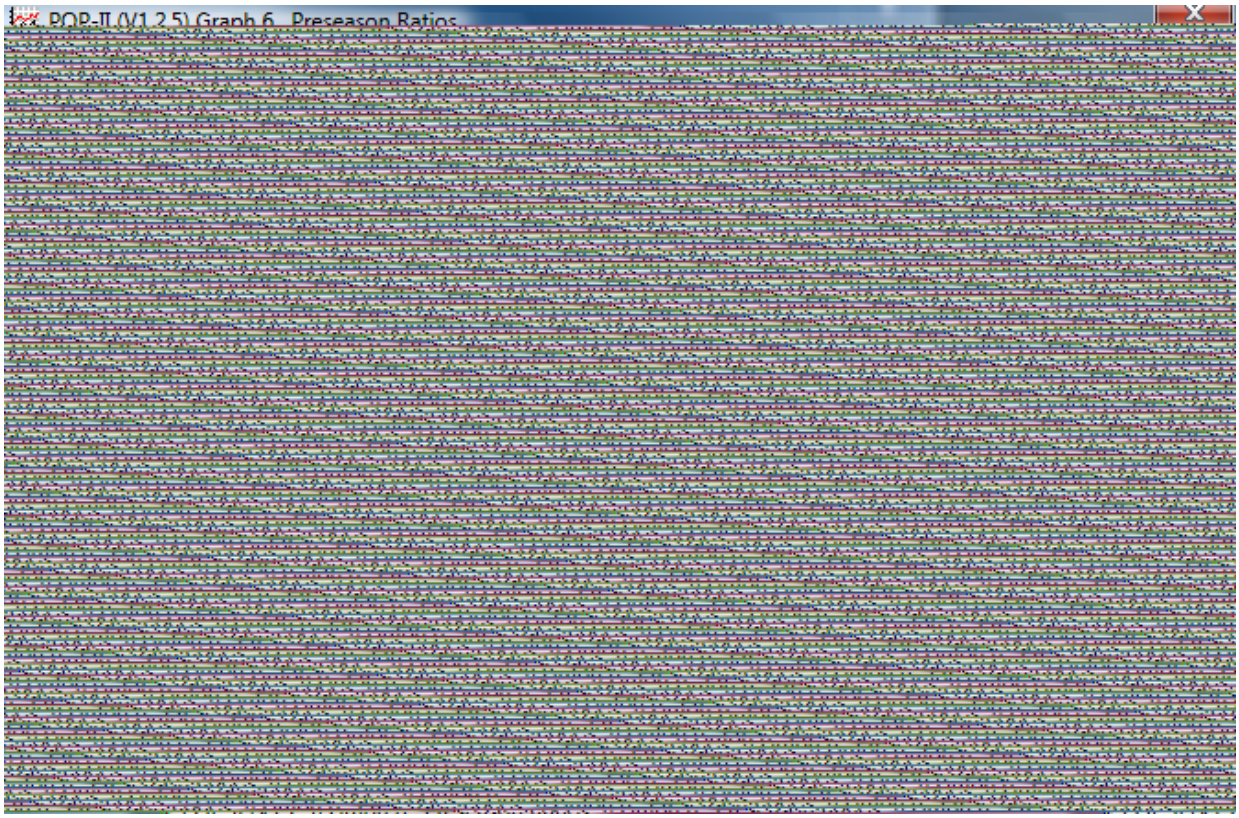
| YR | SIM | OBS |
|---|---|---|
| 05 | 49 | 49 |
| 06 | 60 | 60 |
| 07 | 53 | 53 |
| 08 | 55 | 55 |
| 09 | 61 | 61 |
| 10 | 43 | 43 |
| 11 | 46 | 46 |
| 12 | 62 | ----- |
| | AVERAGES | |
| of Col. | 54 | |
| of Pair | 52 | 52 |

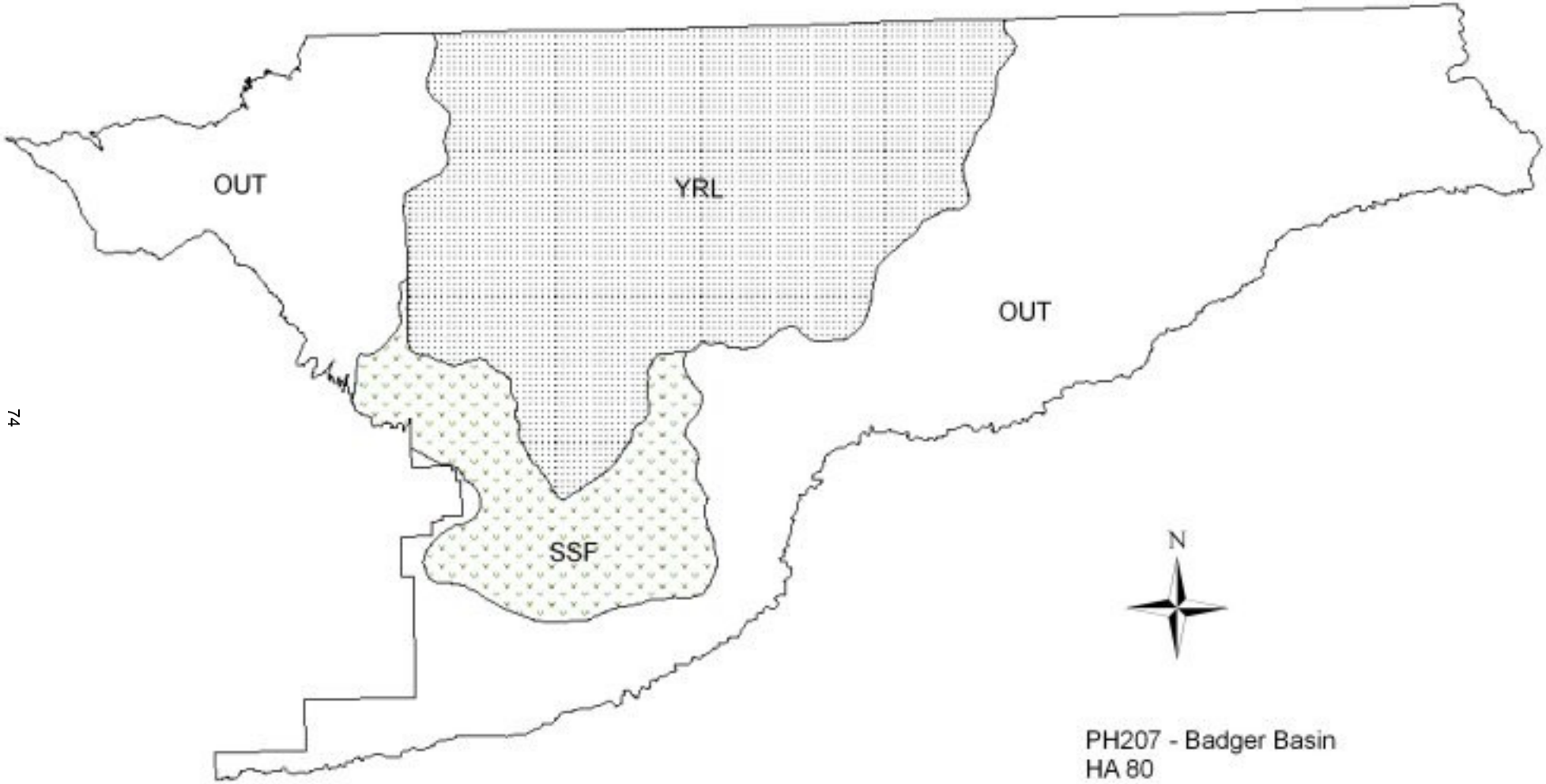
POP-II (V1.2.5) Graph 6. Preseason Ratios




A205.GN1, 02/26/2012 11:07 am, Correlation (R) = 0.712, GOF = 0.624

| YR | SIM | OBS |
|---|---|---|
| 05 | 38 | 32 |
| 06 | 47 | 48 |
| 07 | 57 | 32 |
| 08 | 64 | 48 |
| 09 | 71 | 61 |
| 10 | 75 | 55 |
| 11 | 75 | 49 |
| 12 | 78 | ----- |
| | AVERAGES | |
| of Col. | 63 | |
| of Pair | 61 | 46 |


POP-II (V1.2.5) Graph 6 - Preseason Ratios




PH207 - Badger Basin
HA 80
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