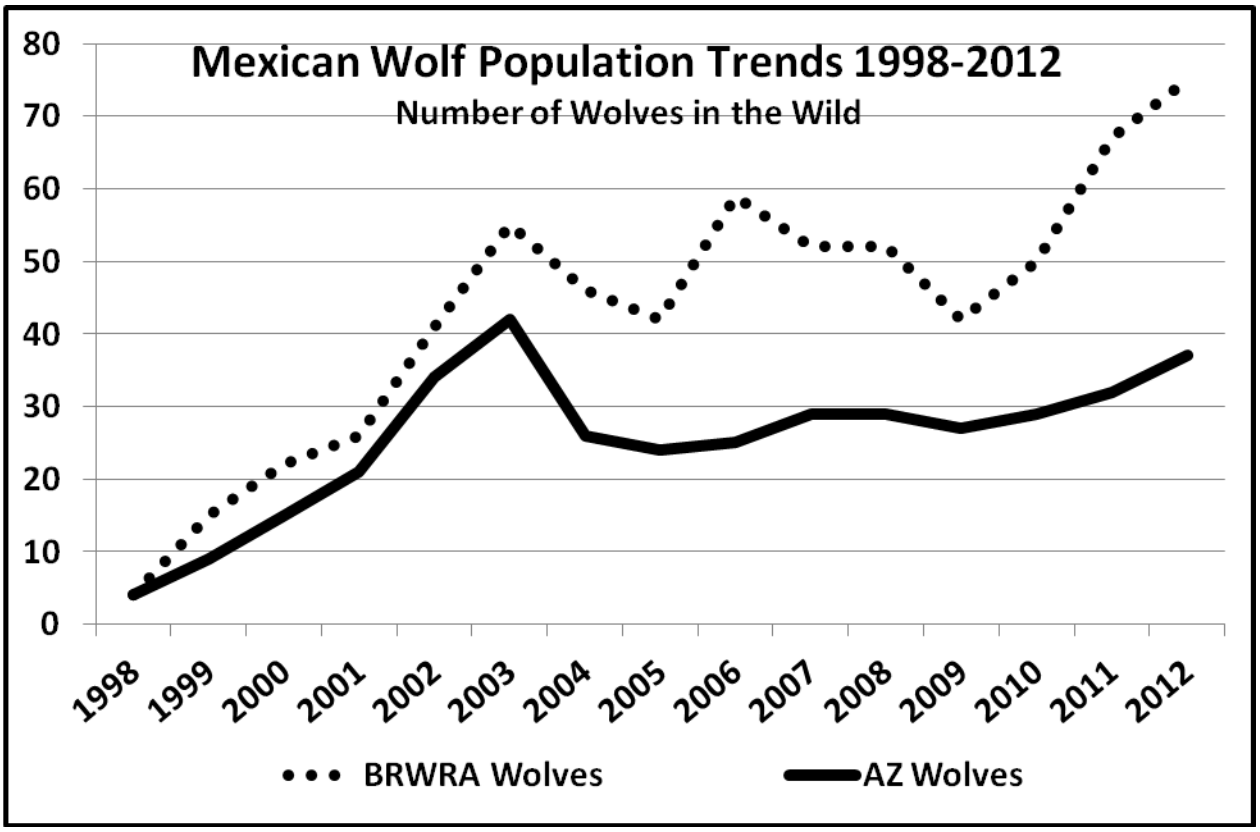
MEXICAN WOLF IMPACTS ON DEER AND ELK POPULATIONS IN ARIZONA 1998 THROUGH 2012

Starting in 1998, Mexican wolves have been reintroduced into the Blue Range Wolf Recovery Area (BRWRA) located in eastern Arizona and western New Mexico.

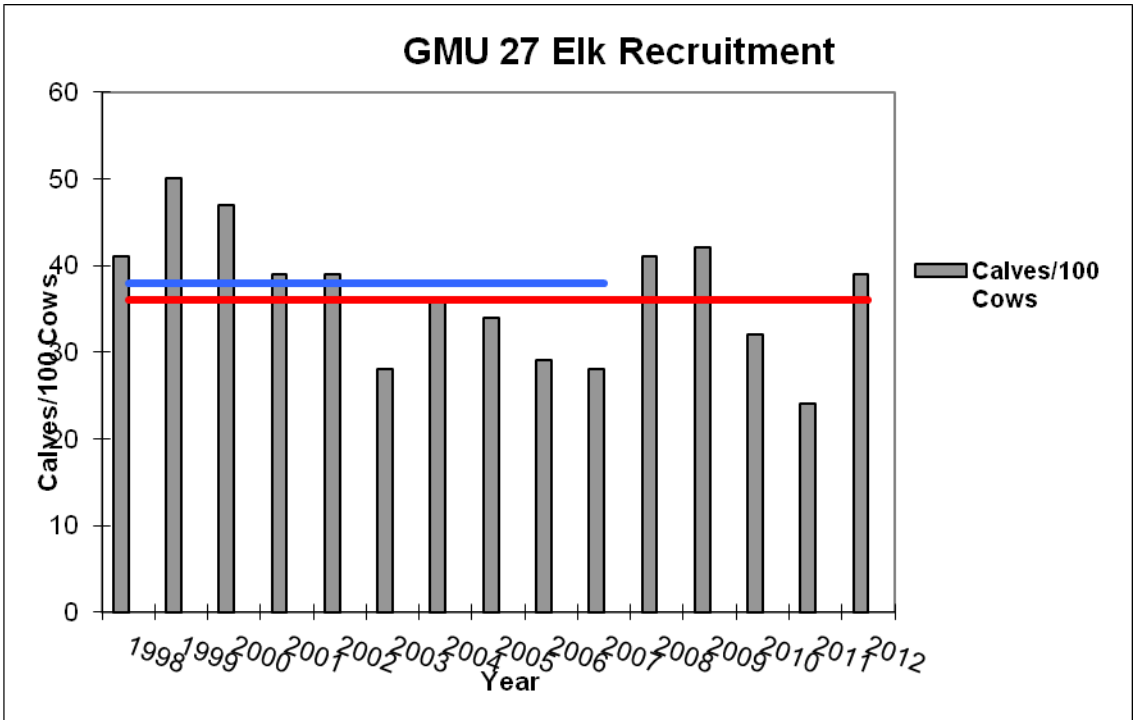
At the end of 2012, the Interagency Field Team (IFT) of the Mexican Wolf Reintroduction Project estimated a minimum population of 37 wolves in the BRWRA in Arizona, which includes the Fort Apache Indian Reservation.

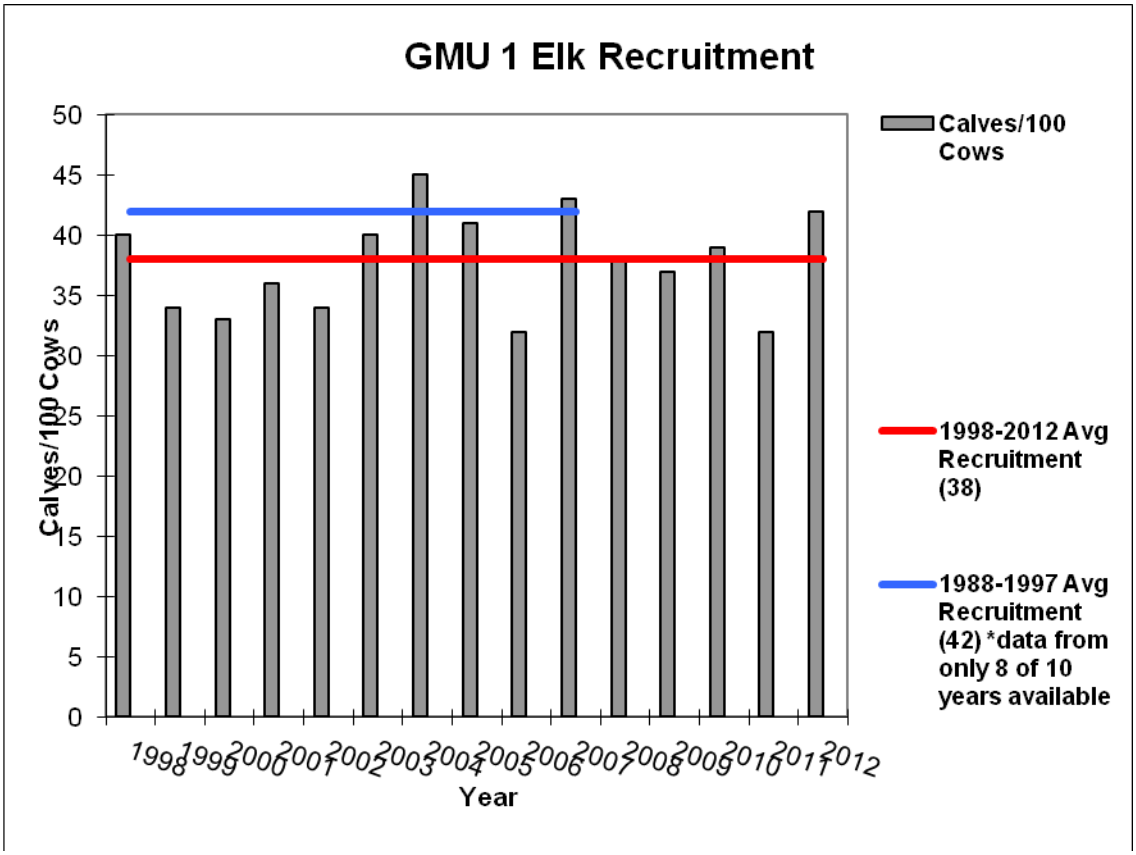


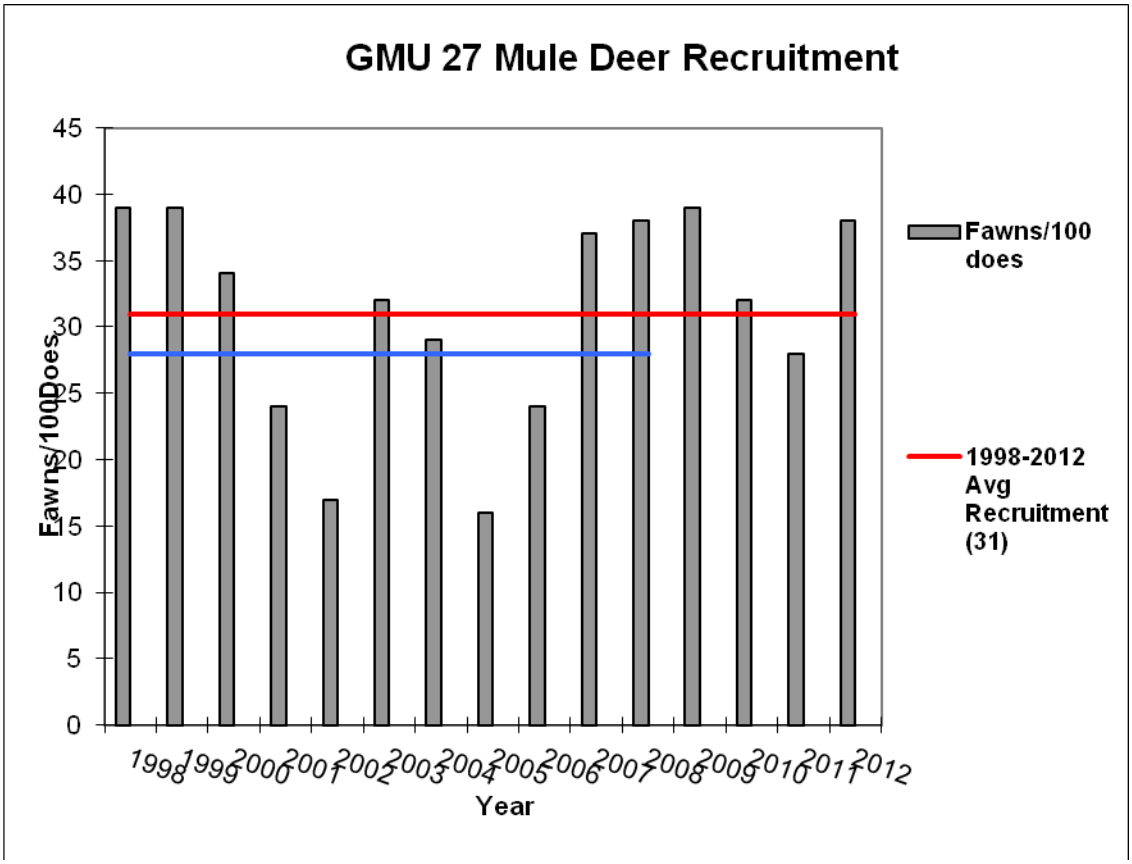
Information collected by IFT personnel shows Mexican wolves use elk as their primary prey source, including elk calves during spring and summer calving season.

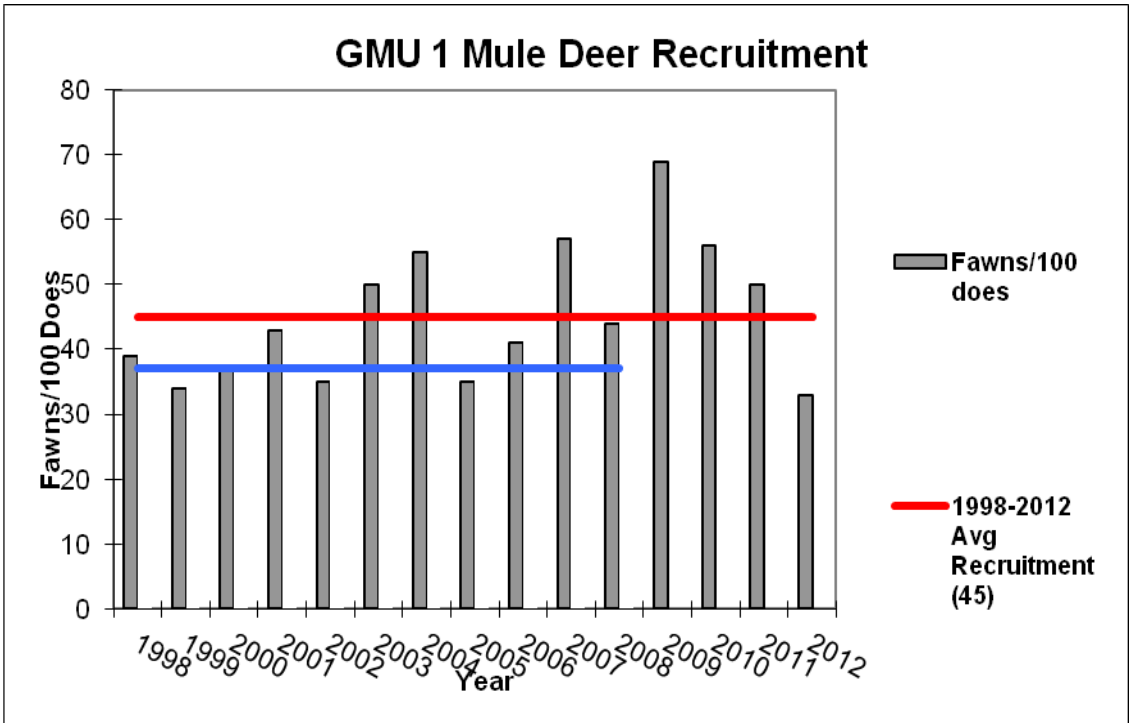
An analysis comparing elk calf recruitment in Game Management Units (GMU) 1 and 27 in the BRWRA before (pre-1998) and after Mexican wolves were established in Arizona has not shown a negative impact on the number of elk calves that survive though early fall time periods.

Likewise, an analysis comparing mule deer fawn recruitment in GMU 1 and 27 in the BRWRA before (pre-1998) and after Mexican wolves were established in Arizona has not shown a negative impact on the number of fawns that survive though early winter periods.

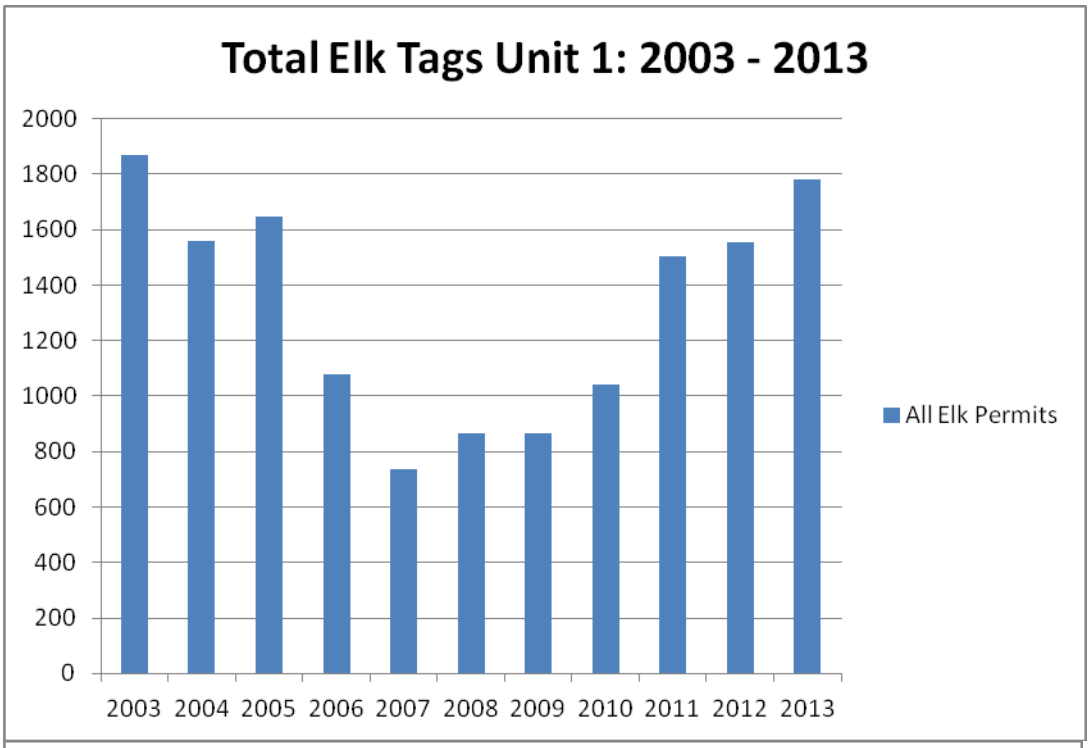

GMU 27 Elk Recruitment
Calves/100 Cows
60
50
40
30
20
10
0
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Year
Calves/100 Cows

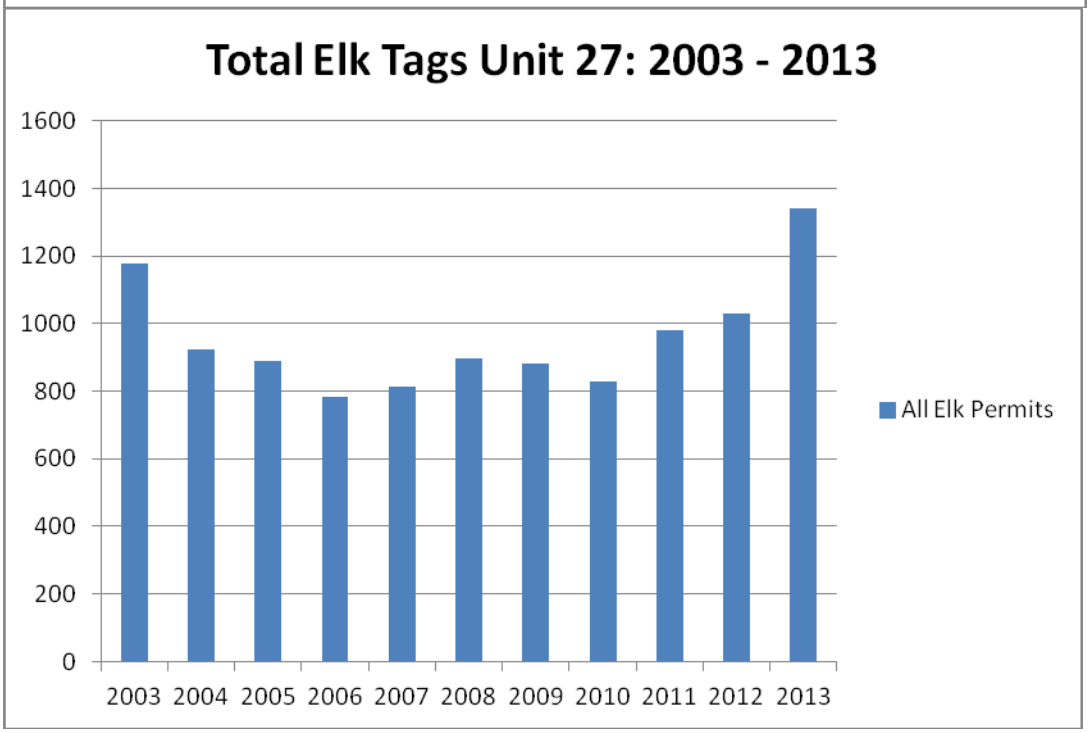

GMU 1 Elk Recruitment
Calves/100 Cows
50
45
40
35
30
25
20
15
10
5
0
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Year
Calves/100 Cows
1998-2012 Avg Recruitment (38)
1988-1997 Avg Recruitment (42) *data from only 8 of 10 years available


GMU 27 Mule Deer Recruitment
Fawns/100 Does
45
40
35
30
25
20
15
10
5
0
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Year
Fawns/100 does
1998-2012 Avg Recruitment (31)


GMU 1 Mule Deer Recruitment
Fawns/100 Does
80
70
60
50
40
30
20
10
0
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Year
Fawns/100 does
1998-2012 Avg Recruitment (45)

The number of elk permits authorized in GMU 1 and 27 by the Arizona Game and Fish Department has varied since wolves were reintroduced into Arizona. The variation is due to a variety of management-related objectives; however, elk availability for hunters has not been a reason for the reduction observed in 2006 and 2007. Since 2008, elk permits have steadily increased in these units.





An analysis of hunt success for all elk hunters in GMU 1 and 27 has not shown that hunter success has decreased significantly since wolves were established in these units.