Utah Division of
WILDLIFE RESOURCES

Utah's Predator Control Program Summary

Program activities and data from July 1, 2012 through June 30, 2013

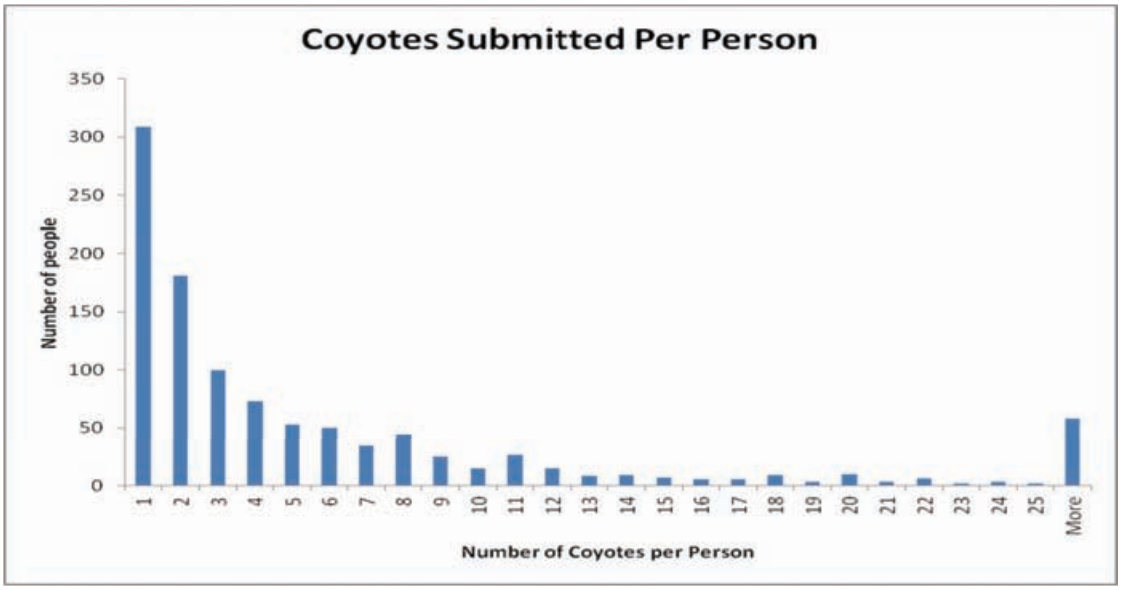
Utah's *Mule Deer Protection Act* went into effect in July 2012. Its primary goal is to remove coyotes from areas where they are preying on mule deer. The legislation set aside $500,000 from the Utah General Fund to pay people who killed coyotes in Utah. To process those payments, the Utah Division of Wildlife Resources (Division) created the General Predator Control Program. The Division absorbed the extra costs, adapting its computer programs for the payment system and sending employees to 19 statewide locations to accept coyotes for payments. That way, the entire $500,000 was available for participants in the program. The Division began accepting coyotes for payment on Sept. 3, 2012. In order to be reimbursed, each participant agreed to submit a coyote scalp with two ears, the lower jaw and a simple datasheet that documented where the coyote was killed.

The *Mule Deer Protection Act* also provided for the creation of a Targeted Predator Control Program, which allows the Division to contract with individuals to remove coyotes from specified areas. To date, only a small amount of work has been completed under this program.

Participation, payments and coyotes submitted for payment

During the first year of the program, participants turned in 7,160 coyotes for a total of $380,950. Payments went to the General Program participants and also to the Targeted Program contractors who removed coyotes on the Henry Mountains, Pahvant and Elk Ridge deer units.

Most of the 1,055 people who participated in the General Predator Control Program submitted low numbers of coyotes. Only 60 participants — less than six percent — submitted 25 or more coyotes.



Impact of the program: Estimates from survey data

The Division's yearly furbearer survey provided more information about coyote harvest. Until the 2012–2013 season, average yearly harvest of coyotes by fur harvesters was 7,397 animals. That number dropped to 5,557 during 2012–2013. Participants in the General Predator Control Program likely harvested some coyotes that normally would have been killed by fur takers. Nearly half (43 percent) of the fur harvesters said they increased their efforts to target coyotes because of the program. About 50 percent of licensed fur takers (440) submitted coyotes for payment.

Based on survey data, the program potentially added 615 new trappers and hunters. It is difficult to calculate exactly how many more coyotes were killed because of the General Predator Control Program, but it was probably about 3,000–4,800 additional coyotes in 2012–2013.

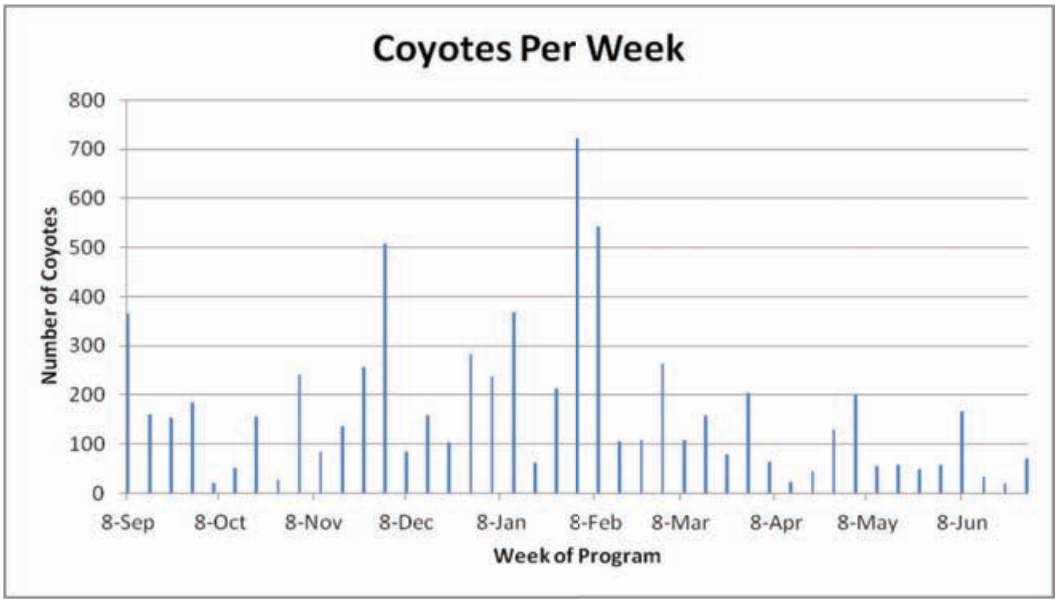
Biological data

As a part of the program, biologists also collected tissue samples and information about harvest locations and hunting methods. Sometimes, when there were long lines or computer problems, the Division's specialists focused on quicker customer service. In those instances, they did not collect extra data from the people who were checking in coyotes. That is why the Division does not have full data for all coyotes removed as part of the program.

Of the 6,277 coyotes for which the information was available, 3,261 (52 percent) were male, 2,897 (46 percent) were female, and 119 (2 percent) did not have gender recorded. Hunting-method reports indicated that 4,224 coyotes (67 percent) were taken by shooting, 1,219 (19 percent) were trapped or snared, 68 (1 percent) were taken from dens and 6 (<1 percent) were killed on roads. There were 760 animals for which the hunting method wasn't reported.

Timing of coyote submission

Peak months for coyote submission were November and February. Seventy-five percent of all coyotes were submitted by February 23.

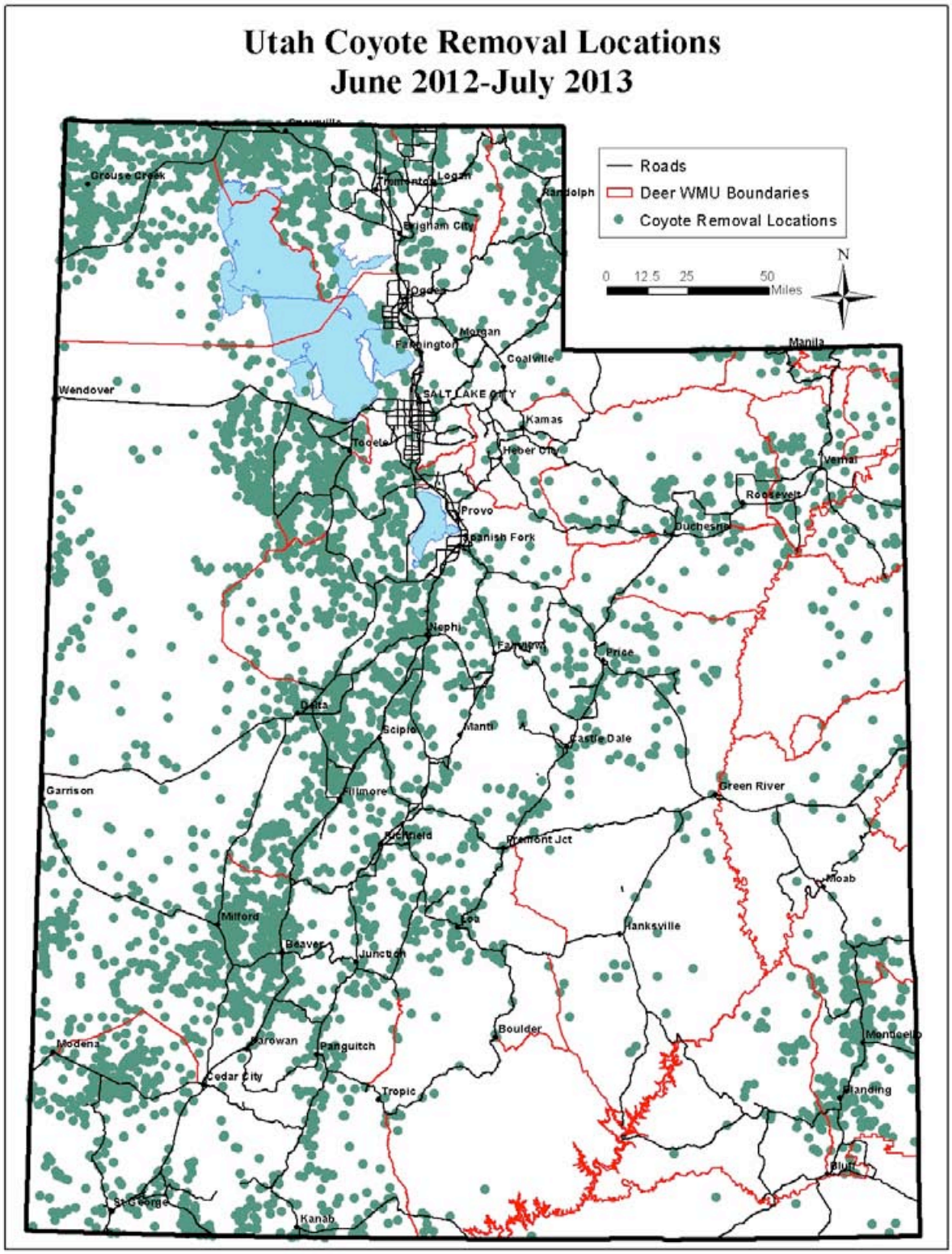


Distribution of coyote take

Coyote removal locations were plotted within deer units across the state. Over one-third (37 percent) of the coyotes (2,324 animals) were removed from only three deer hunt units: Box Elder, West Desert and Fillmore.

Unit	Number of Coyotes	Percent
Box Elder	1142	18.2
West Desert	661	10.5
Fillmore	521	8.3
Beaver	401	6.4
San Juan	375	6.0
Oquirrh-Stansbury	340	5.4
SW Desert	329	5.2
Pine Valley	318	5.1
Central Mountains	301	4.8
Cache	272	4.3
South Slope	251	4.0
Zion	181	2.9
Plateau	145	2.3
Monroe	122	1.9
Nine Mile	103	1.6
Wasatch Mts	103	1.6
San Rafael	101	1.6
Paunsaugunt	94	1.5
Morgan South Rich	92	1.5
North Slope	67	1.1
Panguitch Lake	62	1.0
La Sal	56	0.9
Ogden	49	0.8
Mt. Dutton	43	0.7
Book Cliffs	41	0.7
Chalk Creek	30	0.5
East Canyon	23	0.4
Kaiparowits	20	0.3
Navajo Res	15	0.2
Henry Mountains	12	0.2
Kamas	7	0.1

Utah Coyote Removal Locations
June 2012-July 2013



Potential impact on mule deer populations

It is too early to make conclusions about how effective Utah's Predator Control Program has been, but Division biologists have begun examining the available data.

About 20 percent of Utah is categorized as deer summer range, which includes the areas where deer have their fawns. Because coyotes prey upon fawns, it is important to remove coyotes from deer summer ranges. Only 844 (13 percent) of the coyotes were killed on these summer ranges, however. There are many possible reasons for the low coyote-removal rate in areas important for mule deer production. For instance, program participants may have found it more difficult to hunt coyotes in mountainous areas, or there may have been lower densities of coyotes on deer summer ranges. In any event, these initial data are disappointing, and the Division anticipates the program will be more effective if more coyotes are harvested on summer ranges.

The Division collects data every year on how many fawns are born to the does in each herd. Biologists compare the number of fawns to the number of does to calculate the fawn-to-doe ratio. If removing coyotes protects fawns, then higher fawn-to-doe ratios should be seen on deer units where more coyotes are killed. Also, the average fawn-to-doe ratio in the state should increase over time.

The Predator Control Program did not begin until July 2012, so there was little opportunity to impact fawn survival in 2012. (Counts of fawns and does began in December 2012.) In future years, the Division will analyze data to determine if there is a correlation between the number of coyotes killed and the fawn-to-doe ratio, and also to determine if the state's average fawn-to-doe ratio increases while the program is in place.

Conclusion

Utah's Predator Control Program was efficiently, effectively and rapidly implemented during the initial months of the 2012 fiscal year. The program likely increased the numbers of coyotes killed, and it provided economic rewards to individuals throughout the state. The program will need to be in place for additional time before the Division can determine the total effect of the General Predator Control Program on Utah's mule deer populations.