

Commentary

Did predator control go to the dogs? A 40-year retrospective

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IN 1980, Green and Woodruff (1980) published an article titled, “Is predator control going to the dogs?” At that time, the use of livestock guardian dogs (*Canis lupus familiaris*; LGDs) was a relatively new wildlife damage management tool in North America. Pioneered by various groups and professionals, use of LGDs in the United States increased following its introduction during the 1970s (Coppinger et al. 1987, Coppinger and Coppinger 2014). An ancient technique throughout much of Europe and Asia, a host of drivers precipitated the importation of LGDs to the United States, including a desire for increased diversity of less-than-lethal wildlife damage management techniques, 24-hour protection of livestock, a decline in landscape-scale trapping of carnivores due to decreasing small ruminant production, and declining fur markets (Green and Woodruff 1980). This importation brought several breeds of LGDs, rearing, bonding, training, and management practices, and general husbandry techniques in the context of LGDs (Coppinger and Coppinger 2014). Although this tool passed the test of time in its point of origin, early North American adopters stepped into a brave new world with little to guide them.

In the modern world, knowledge of methods and means of wildlife damage management exists in written texts, films, and other guides (Green and Woodruff 1980, Green et al. 1984). For LGDs, however, such materials did not exist 40 years ago. In cultures where the use of LGDs rose and expanded over the centuries, LGDs need little introduction or proof-of-effectiveness (Akyazi et al. 2017). For the new practitioner, however, the proper use of LGDs seems esoteric at best, and effectiveness inconceivable. How does one overcome a gap in understanding and knowledge in the modern world?

Beyond instruction, science must provide practitioners with guidelines for implementation based on rigorous evaluation of the behavior of LGDs (Treves et al. 2016). Over the last few decades, ecologists worldwide began a rigorous program to evaluate the use and effects of LGDs on livestock and natural systems (Gehring et al. 2010, Urbigkit and Urbigkit 2010, van Bommel and Johnson 2016). In the United States, a similar trend in research followed the increased use of LGDs among ranching operations (Andelt 1985, Coppinger et al. 1987, Treves et al. 2006, Urbigkit and Urbigkit 2010). Truly, it seems that a scientific understanding of an ancient tool for wildlife damage management emerged.

Forty years after the question was first raised, we must ask, “Did predator management go to the dogs?” The answer may or may not be clear. Although LGDs are a much more common tool today than they once were, there is still much we do not know about the use of this tool. Further, practitioners continue to develop new questions and problems as time progresses. The science of wildlife management is ever-adaptive, and so we must take stock at times of what new challenges lay before us. We dedicate this special issue of *Human–Wildlife Interactions* to the memory of Dr. Raymond Coppinger, and we seek to present the latest science on the state of LGDs as a wildlife damage management tool, take stock of where we are today, and provide insights as to where the next 40 years may take us.

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