



ILLEGAL HARVEST AND MULE DEER POPULATIONS

Fact Sheet #8

OVERVIEW

Mule deer populations are stable or declining in many western states and provinces. Causes are varied and can be difficult to identify. In simple terms, populations grow when the number of offspring that reach adulthood (recruitment) exceeds the number of adults that die from all causes. When habitat is not the primary limiting factor, balancing mortality with recruitment can stabilize a population or allow it to grow.

When combined with effective population monitoring, regulated hunting is a valuable tool for wildlife managers to influence mule deer population size and structure.

When mule deer recruitment is high and populations exceed what habitats can reasonably support, harvest tends to replace other forms of mortality with no effect on populations. In situations where recruitment is lower than overall mortality, additional harvest, especially females, is less likely to replace other mortality (it becomes additive) and populations can decline. Illegal harvest (Poaching), in addition to prescribed legal harvest can be additive and limit population growth.



BACKGROUND

Obtaining estimates of illegal harvest rates is notoriously difficult; poachers by their very nature are not outwardly obvious. Illegal activities will often occur during legitimate, established hunting seasons. Researchers have estimated that as few as 1–2% of wildlife law violations ever come to the attention of law enforcement authorities.

Reasons for illegal harvest vary widely. Commonly-cited reasons include trophy poaching, commercial gain, household consumption (subsistence), recreational satisfactions, killing just to shoot something, protection of self and property, poaching to rebel against regulation, traditional rights of use, disagreement with specific regulations, and the simple challenge of eluding law enforcement officers.

IMPACTS OF POACHING ON MULE DEER POPULATIONS

Illegal harvest can have a variety of impacts on deer populations, depending on the extent of illegal activities. In Colorado, long-term monitoring of radio collared deer indicates illegal harvest is not a significant factor, ranging from 0.4%–1.5% of doe mortalities and 1.5% – 1.7% of buck mortalities. However, in a study currently being summarized in Oregon, illegal harvest appears to be much higher than reported elsewhere. Managers believe illegal take of females is additive and contributing to the declining population trend in that study area. They observed no seasonal or spatial patterns of when and where deer were poached. Illegal removal of too many older bucks for trophy reasons can skew buck:doe ratios and potentially reduce the overall age structure of bucks. Most importantly, illegal removal of these mature bucks from the huntable population can reduce future lawful hunting opportunities.

ACTIONS TO REDUCE POACHING ON MULE DEER

Law enforcement authorities in mule deer country use a variety of actions designed to deter and reduce poaching of mule deer.

- Simplified regulations may reduce unintended or accidental violation of deer hunting laws.
- Increasing penalties and fines can serve as a deterrent to casual or opportunistic poachers. However, costs of some trophy hunting opportunities, such as special auction tags, may indicate penalty values need to be extremely high to have an effect on some individuals.
- Increased enforcement activities, such as saturation patrols, and decoy operations (use of mounted game animals as bait for poachers) tend to reduce poaching activities. Enforcement actions are expensive, and maintaining a sustained presence is important. However, effectiveness declines as law enforcement activities are reduced; a concern as enforcement resources are affected by declining budgets.
- Covert or undercover operations can effectively target established or commercial poaching operations. However, these projects might require much time (up to several years) to secure sufficient evidence, during which the resource may continue to suffer.
- Many court systems in mule deer country have extraordinarily high case loads and wildlife poaching cases may not compete with more serious crimes against people or society. Educating court systems and prosecutors about the value mule deer represent to an area, and potential loss due to theft of this public resource through poaching, may increase prosecution rates in poaching-related cases. Identifying the value of lawful harvest, hunters, and hunter expenditures will reinforce this message.
- The Interstate Wildlife Violator Compact (IWVC) is a proactive deterrent to poaching; Poachers may be suspended from hunting and fishing in all 42 member states.
- Perhaps the most effective action is to have mule deer hunters police their own ranks. Most states and provinces in mule deer ranges have a mechanism for hunters to report violations (e.g., toll-free phone numbers). This approach capitalizes on the ethical hunter and provides rewards, usually financial, for turning in poachers.

CONCLUSIONS

Poaching of mule deer can be a serious issue in some local populations, and occurs due to a variety of reasons. Effects include potentially limiting population growth, affecting structure of populations, and impacting hunting opportunities for lawful hunters. No single solution can completely control poaching, although many law enforcement options are available and currently being used to minimize its effect on mule deer populations. Hunter reporting may be the single best tool available to enforcement officers.

Photo: Wyatt Brooks



More information on mule deer can be found at www.muledeerworkinggroup.com

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