NEW MEXICO

Rep:

1. Current population trend or estimate - and proximity to management objectives:

We estimate 250,000 deer, a stable trend statewide. The vast majority of these are mule deer (both Odecoileus hemionus hemionus and O.h. crooki), it also includes small numbers of two white-tail subspecies, O. virginianus texanus and O.v. couesi. Comparing harvest projections to management objectives will be done this fall.

2. 1992 Hunting season statistics:

Type/length of season:	# of hunters afield:	# of hunter days:	% success:	Harvest Antler:	Harvest Antlerless:
Bow/20 days	*5,386*	*50,769*	*9.4*	*745*	*0*
Muzzleloader/10 days	*5,255*	*24,179*	*32.2*	*1,671*	*0*
Rifle/2-7 days	*63,775*	*207,036*	*25.2*	*15,169*	*0*

**Rifle hunts consist of one to 3 hunt periods per region, the hunts are variable in length, running from 2 days to 7 days per hunt, starting on either the traditional Saturday or mid-week.*

3. Method used to estimate harvest:

Projections from hunter-mailed questionnaire.

4. Do you limit hunters to one season (rifle,archery or muzzleloader)?

Yes, hunters must choose a weapon, a region and a hunt, with very few exceptions.

5. Do your deer seasons extend into the breeding season? If so, how far?

Generally the breeding season is late November through December for the northern New Mexico deer, it extends through February and later in the south. All hunts are over by mid-November with the exception of a couple of late bow hunts that extend into January.

6. How many deer can a hunter legally take per year?

One fork-antlered buck.

7. Do you use antler-point restriction regulations? If so, what is the purpose of this regulation and is the objective being met? How do you assess hunter compliance - illegal kill?

Yes, forked-antlered or bigger, defined as a buck with at least 1 antler with 2 distinct points, a burr at the base does not constitute a point or a fork. The purpose is to protect does from hunters mistaking those does for spike bucks. There is no organized assessment of hunter compliance.

8. Do you have regulations to limit or distribute hunters? What type of regulations and are they working?

Yes, hunters must choose their weapon, region, and hunt, which is, generally, three short hunts per region. This limits and distributes hunters well in unlimited "over-the counter" deer hunts. New Mexico also has restricted entry permit hunts in wildlife areas and selected regions. In 1992, 26 entry hunts were held in 11 areas with approximately 5,000 permits total. We feel they are working well.

9. Do you use access (road) management to regulate hunter distribution? What is the hunting publics reaction? Who is responsible for enforcement of closures etc.?

Limited access control is accomplished in conjunction with the Federal Land management agencies. Generally, it is well received. Department and Federal Agencies enforce closures.

10. Do you use a system such as "preference points" to distribute the opportunity to draw big game permits? If yes, what has been your experience with such a system?

Not for deer. New Mexico,is trying a preference system again for elk, beginning in 1991, the first drawing is to be held in 1996. Approximately 20 years ago a preference system for elk failed, due, in part, because odds of drawing actually became smaller as the pool of annually rejected applicants surpassed the available permits.

11. In what ways do you believe hunting impacts your deer populations (ie. compensatory/additive mortality, total population size, genetics, behaviour, etc.)? What data do you have to support this?

Hunting is additive mortality to deer populations in New Mexico. In populations where hunting has recently been curtailed or has not occurred for an extended period, the buck to doe ratio increases, approaching, but not reaching 1:1. The statewide average for hunted populations is around 20 bucks per 100 does. The total populations seems to increase with the added bucks only to level off with natural mortality rates defining the herd size. Data is from hunted and unhunted study populations.

12. What do you feel are the major factor(s) limiting the deer populations, and what evidence is this based on?

Our Population/Environment/Hunt computer model has demonstrated adverse relationships between low rainfall and deer survival. The weather is a major influence on survival and reproduction. Low rainfall combined with New Mexico's intense solar radiation and shallow erodible soils provide sparse vegetation for cover and forage. It takes several consecutive wet years, and infrequent event, to see recruitment improve. These dry conditions set up a chain reaction detrimental to deer when combined with forage/cover removal by grazing, which in turn increases vulnerability to predation and poaching, etc.

13. Do you make any attempts to model deer populations? If so, please describe the model. Identify any problems.

Yes. The mule deer model predicts changes in the size and age/sex structure of a herd based on the interaction among population parameters, environmental variables and hunting. Through multivariate statistics, sub-models predict condition, birth and survival rates based on associations with environmental variables. The hunt sub-model predicts harvest mortality based on hunter pressure and regulations (weapon type, season length).

14. What is your state or province's approach to manipulating habitat to benefit deer?

Habitat manipulation on public land is the responsibility of Federal and State land management agencies.

15. Primary deer research efforts underway at this time (please list):

The final report on a 16-year mule deer study is due this fall, no other research is scheduled.