

MOUNTAIN LION MANAGEMENT GUIDELINES

Procedure 1: Maintain a complete database from all harvest sources, through a mandatory checkout system, including age, sex, kill location to index population trends. Conduct a hunter questionnaire.

- A. Hunters will be responsible for reporting mountain lion harvest within 48 hours of harvest (as per R12-4-308). All hunter-harvested lions must be physically checked out at a regional or state AGFD office, or with authorized AGFD personnel, within 10 days of harvest. The hunter will present the head and complete hide, with evidence of sex attached, for inspection. Data collected will include: age, sex, reproductive status, hunting method, harvest date, harvest location, biological condition of animal, evidence of disease, hunter effort, and other pertinent data as determined. One premolar tooth will be collected.
- B. Depredation kills reported under ARS 17-302 will be summarized by the Game Branch and included in an annual harvest report. This report will summarize all lions taken by management unit, age, sex, and method of taking. Management units may be grouped into physiographic regions for some criteria. This report will be prepared and distributed prior to the spring Commission meeting when the regulations are set for Commission Order 10: Lion.
- C. Field Operations personnel should contact ranchers in their Regions and provide them with copies and explanations of ARS 17-302.
- D. When feasible, Department personnel should collect depredating lion carcasses harvested according to ARS 17-302 to collect pertinent biological data.

Procedure 2: Conduct a hunter and houndsmen questionnaire in alternating years.

- A. Every second year a questionnaire will be used to determine hunter effort and hunting techniques.
- B. In alternate years a questionnaire will be used to query houndsmen as to hunter effort, to determine lions captured/day (CPU), and to gather other pertinent information as required. Information may be collected by questionnaire or by providing houndsmen with some form of annual or biennial activity log.

Procedure 3: Identify important habitats and travel corridors for lion populations. Ensure protection and improvement where possible through cooperation with land management agencies and other landowners.

- A. Update statewide lion potential distribution and density maps. Determine mountain lion habitat parameters, and quantitatively map habitats, habitat fragmentation and travel corridors.
- B. Integrate lion habitats and travel corridors with data gathered on prey populations to improve mountain lion and prey species habitat management.

Procedure 4: Determine the feasibility of collecting population characteristics on a lion management area (LMA) basis.

- A. Identify mountain lion management areas that contain similar habitat characteristics, climatic conditions, hunter use patterns, lion densities, and prey densities.
- B. Estimate potential adult population for each LMA using data, including habitat and distribution maps, track surveys, research data, mortality data (hunting, depredation and incidental) and observational data (e.g., prey availability and diversity).
- C. Develop lion population trend data to determine the status of populations within each LMA (increasing, stable, decreasing) using habitat and distribution maps, sex and age structure of harvested lions, depredation and nuisance complaints, and prey population status.
- D. Evaluate effects of current habitat management practices on relative abundance.

Procedure 5: Implement hunt structures to increase and direct harvest emphasis toward areas with high lion populations, and where depredation complaints are substantiated, and evaluate the effectiveness of these efforts.

- A. Determine appropriate harvest levels in each lion management area. Implement hunt structures-regulations that maintain a reasonable proportion of older age animals and maintains breeding females and young, with the exception of areas managed under predation management plans, areas where depredation complaints are substantiated, and in areas where prey species populations are determined to be below management objectives.
- B. Developed standardized population trend data sets to be used in formulating mountain lion hunt recommendations. Use habitat and distribution maps, sex and age structure of harvested lions, depredation and nuisance complaints, and prey population status to determine appropriate harvest levels within LMAs).
- C. In hunt areas with insufficient information to provide suitable population trends, seasons should be designed to achieve a harvest consistent with historic harvest levels.
- D. Hunt recommendations will be made in conformance with the Guidelines for Hunting Season Recommendations.

- E. Hunt unit recommendations must be submitted to the Game Branch for review in accordance with the Hunt Recommendations Guideline Schedule.
- F. Population Management Hunts may be used as appropriate to manage mountain lion populations.

Procedure 6: Continue to increase public awareness of mountain lions and their habits, to reduce conflicts with humans.

- A. Maintain brochures regarding mountain lion and human interactions for distribution statewide.
- B. Conduct focused outreach efforts to include media releases and public forums in areas where conflicts are likely to occur.

Procedure 7: Implement the Commission's Predation Management Policy.

- A. All mountain lion predation management plans will conform to the Predation Management Policy approved by the Arizona Game and Fish Commission in October 2000.