WASHINGTON COUGAR STATUS REPORT

RICHARD A. BEAUSOLEIL, Bear / Cougar Specialist, Washington Department of Fish and Wildlife, 3515 Chelan Highway, Wenatchee, Washington, 98801, USA
DONALD A. MARTORELLO, Bear, Cougar, and Special Species Section Manager, Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington, 98501, USA
ROCKY D. SPENCER, Dangerous Wildlife Specialist, Washington Department of Fish and Wildlife, 42404 North Bend Way SE, North Bend, Washington, 98045, USA

Proceedings of the Seventh Mountain Lion Workshop

INTRODUCTION

Cougar *(Puma concolor)* occur throughout most of the forested regions of Washington State, encompassing approximately 88,497 km^2 or 51% of the State (Figure 1). Cougar became a protected big game species in 1966 and hunting seasons and harvest limits were established under the management authority of Washington Department of Fish and Wildlife (WFDW). In 1967, the Washington State Legislature passed a bill establishing a tag system in Washington. In 1970, WDFW began mandatory reporting of cougar kills and in 1979 inspection and sealing of cougar pelts was required for data collection. In the mid-1980's WDFW began collecting cougar teeth for age analysis.

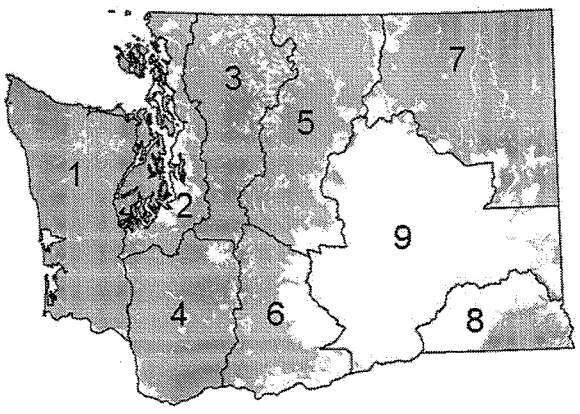

Figure 1. Distribution of cougars (gray) and cougar management units in Washington.

Currently, the statewide cougar management goal is to maintain healthy, self-sustaining cougar populations within each cougar management unit (CMU), except CMU 9, while minimizing the number of negative human-cougar interactions.

HUNTING SEASONS AND HARVEST TRENDS

Cougar seasons have changed significantly over the last several years (Figure 2). During the November 1996 general election, Washington voters passed Initiative 655 (I-655) that banned the use of hounds for hunting cougar and bobcat, and the use of bait and hounds for hunting black bear. In an effort to mitigate the anticipated decrease in cougar harvest (i.e., post I-655), permit-only seasons were replaced with general seasons, cougar seasons were lengthened from approximately 6 weeks to 7 and one-half months, and bag limit was increased from 1 to 2 cougar/year. Legislation was also passed that provided the authority to the Fish and Wildlife Commission to establish reduced costs for cougar and black bear transport tags, which they did from $24 to $5 in 1996 (cougar tags can also be purchased as part of a big game package). The outcome of these strategies is that the number of hunters purchasing a cougar tag in Washington has increased from 1,000 to 59,000. As a result, annual

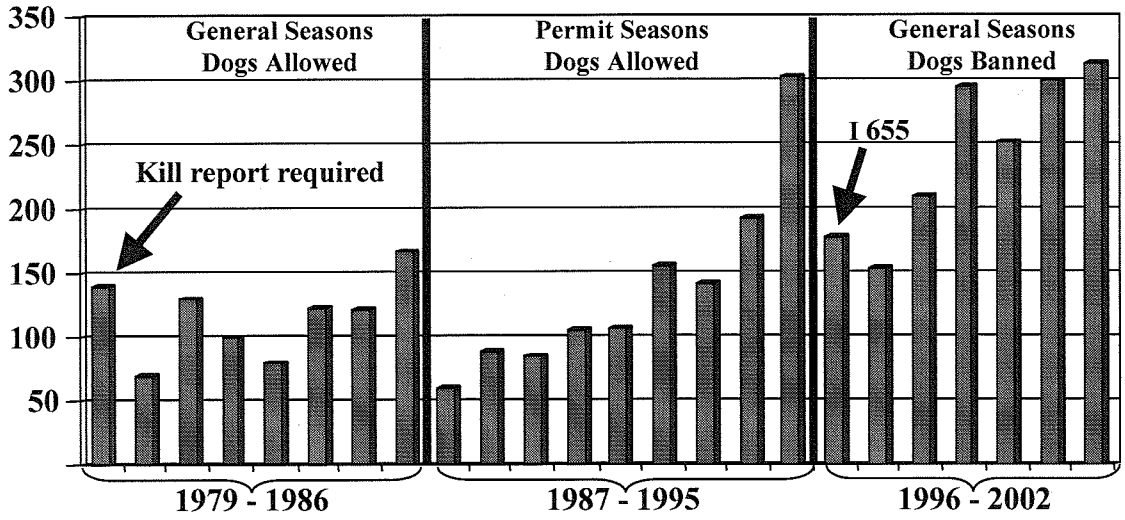

Figure 2. Cougar season structure and harvest in Washington, 1979-2002.

cougar harvest during post I-655 years has increased slightly; however, the composition of the harvest has changed dramatically. The majority of cougar harvested pre-I 655 was done so with the aid of dogs, thus mostly males and older animals were taken. Since 1996, the majority of cougars are harvested either as opportunistic encounters by deer/elk and cougar hunters, or by using tracking and calling techniques. These harvest methods are not as selective as using dogs. Therefore, since 1996, hunters have harvested more females and younger cougars (see oral presentation titled *Cougar Harvest Characteristics With and Without the Use of Dogs* in this proceedings).

POPULATION STATUS AND TREND ANALYSIS

The status of cougar populations is currently estimated through computer population simulation models, harvest characteristics, and, to a lesser degree, trends in human-cougar interactions.

Based on population reconstruction models, harvest age data, and statewide cougar habitat estimates (using GAP analysis), the cougar population in Washington is likely between 2,400–4,000 animals, and cougar population size is likely declining in a few areas of the state.

Typically, the status of local or regional cougar populations are monitored via hunter effort and success, median age data, and percentage of females in the harvest; but only when viewed over several years with consistent harvest methods. Due to the changes in harvest methods during the last several years (predominantly hound hunters during pre I-655 years versus entirely spot-stalk hunters during post I-655 years), no reliable trend data exist to accurately assess regional cougar populations or exploitation levels. As such, new population monitoring efforts are beginning in 2003, where cougar density and adult female survival will be evaluated and monitored in key areas of the State.

HUMAN CONFLICT

Human-cougar interactions are managed through public education, capture-removal, depredation permits, and public safety cougar removals. Since 1995, WDFW has recorded information on human-cougar interactions. Of particular concern is the

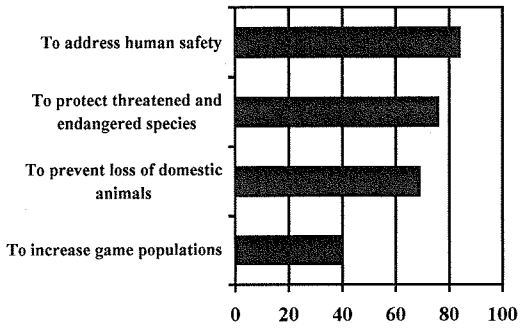

Figure 3. During a general public opinion survey, the percent of Washington respondents that supported reducing predator numbers for specific purposes (Duda et al. 2002).

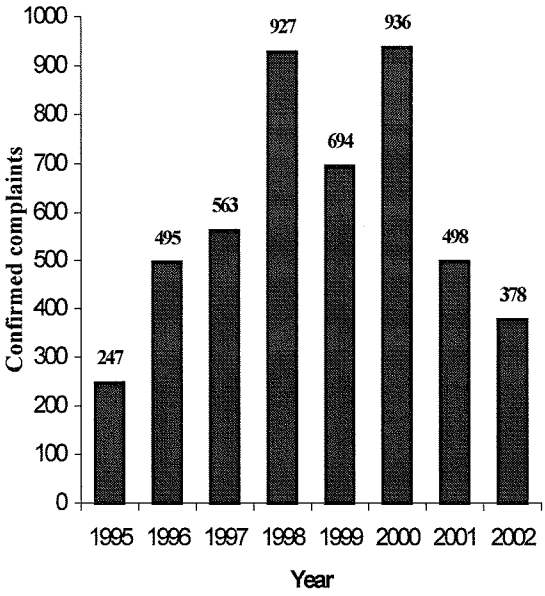

Figure 4. Total confirmed cougar complaints in Washington, 1995-2002 (includes human safety and pet/livestock incidents).

increasing trend in human safety incidents, and pet and livestock depredations. When Washington citizens were asked about their attitudes regarding cougars, over 80% responded that reducing predator numbers for public safety is acceptable (Figure 3). Recognizing the widespread scope of the issue and its importance to cougars and people in the future, current cougar management goals include maintaining sustainable cougar populations and reducing human-cougar interactions. In some cases, reducing cougar populations to a lower, but sustainable level may help achieve both of these goals (Table 1). Given the recent history of high human-cougar interactions, WDFW developed a special cougar removal process to address cougar densities in areas with high levels of human-cougar interactions. Under rules adopted by the Fish and Wildlife Commission, public safety cougar removals occurred in 17 Game Management Units from Dec 15 – Mar. 15, in both the 2001-2002 and 2002-03 seasons; in those seasons 109 and 76 cougar were identified for removal and licensed hunters

Table 1. Cougar population objectives for each cougar management unit in Washington, 2002.

CMU	Geographic Area	Population Objective
1	Coastal	Maintain a stable cougar population
2	Puget Sound	Reduce* cougar population to enhance public safety and protection of property
3	North Cascades	Maintain a stable cougar population
4	South Cascades	Maintain a stable cougar population
5	East Cascades North	Reduce* cougar population to enhance public safety and protection of property
6	East Cascades South	Maintain a stable cougar population
7	Northeastern	Reduce* cougar population to enhance public safety and protection of property
8	Blue Mountains	Maintain a stable cougar population
9	Columbia Basin	Unsustainable; not considered suitable cougar habitat

* Implement cougar population reductions over a 3-year period and monitor annually.

removed 67 and 54 animals, respectively (61% and 71% success rate, respectively). Confirmed human-cougar incidents decreased by 47% during the 2001 calendar year from 936 in 2000 to 498 and an additional 24% in 2002 to 378 (Figure 4).

MANAGEMENT CONCLUSIONS

The statewide cougar population appears to be declining at this time due to increased female harvest and objectives to address public safety and protection of property. Given the distribution of cougars in Washington and the projected growth of human populations, interactions between humans and cougars will likely continue. As such, the long-term future of cougar in Washington ultimately rests in our ability to co-exist. Therefore, management efforts should continue to look for ways to minimize human-cougar interactions, particularly at the local population level.

LITERATURE CITED

DUDA, M.D., P.E. DE MICHELE, M. JONES, W. TESTERMAN, C. ZURAWSKI, J. DEHOFF, A. LANIER, S.J. BISSELL, P. WANG, AND J.B. HERRICK. 2002. Washington residents' opinions on and attitudes toward hunting and game species management. Harrisonburg, Virginia, USA.