### **Cougars And Teaching**

#### Objectives:

Spatial & Habitat Use of Cougars Predation & Food Habits Demography & Kitten Survival Relation to human development Education & Community Outreach



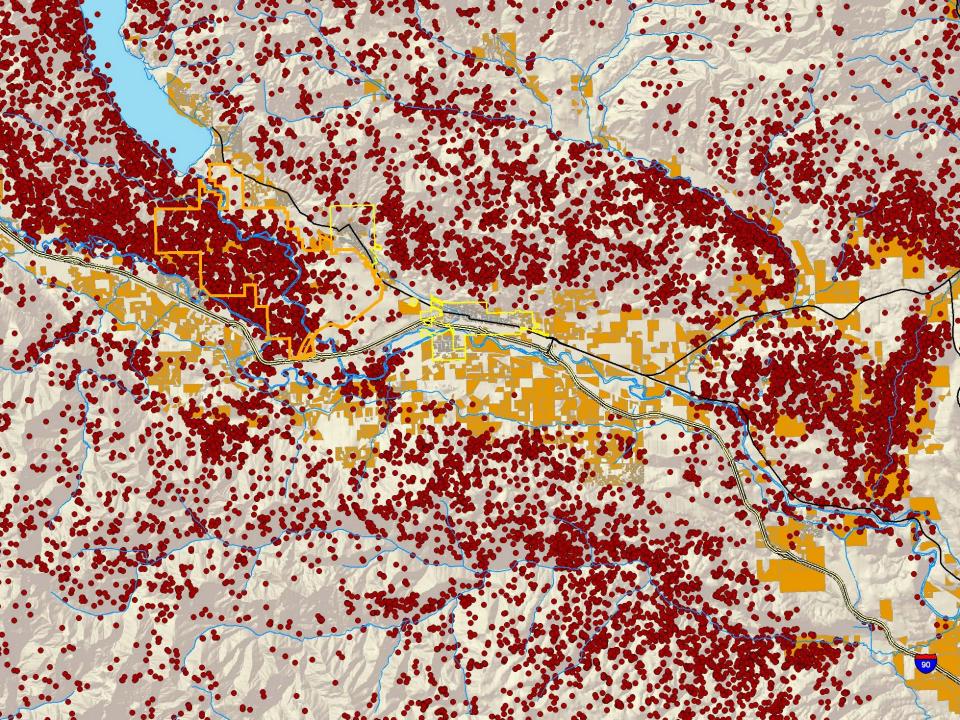
### **Captured and Collared 2001-2008**

46 cougars marked 10 Females (>2 yrs) with GPS collars 16 Males (>2 yrs) with GPS collars

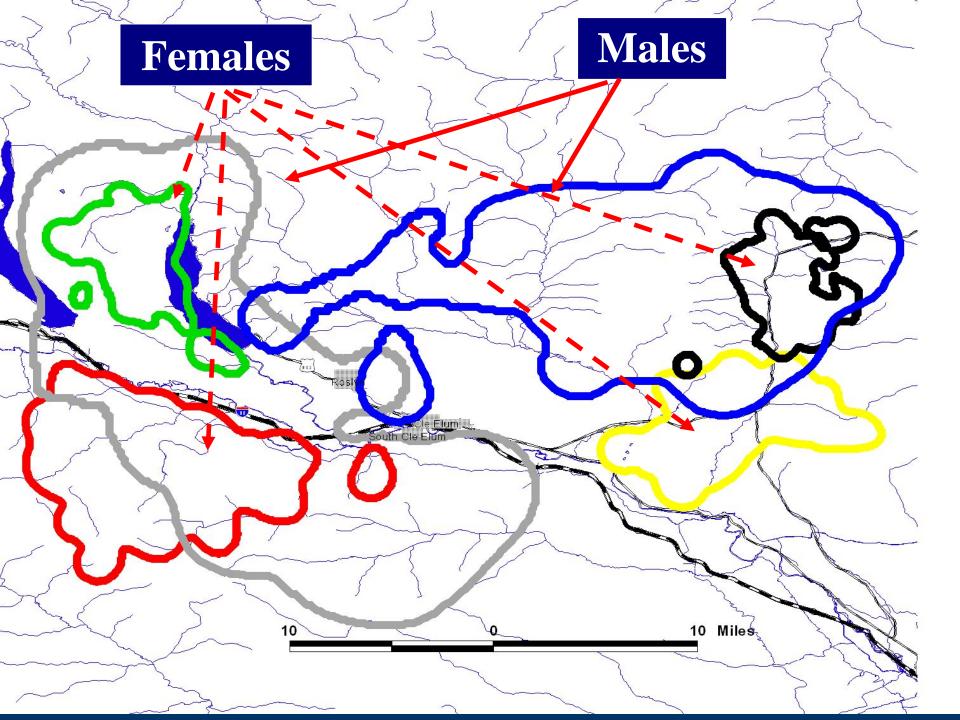


~ 30,000 GPS Locations







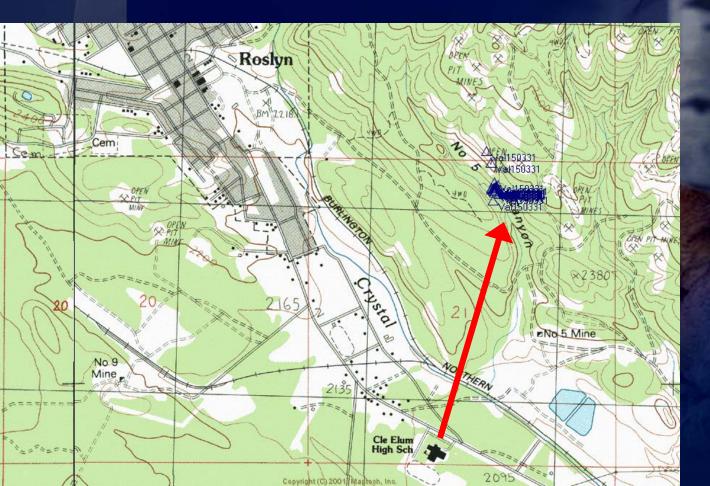


#### Predation events from 2003 - 2008

- ~ 255 Predation events documented
- ~ 19 Cougars\*
- ~ 9 females, 10 males

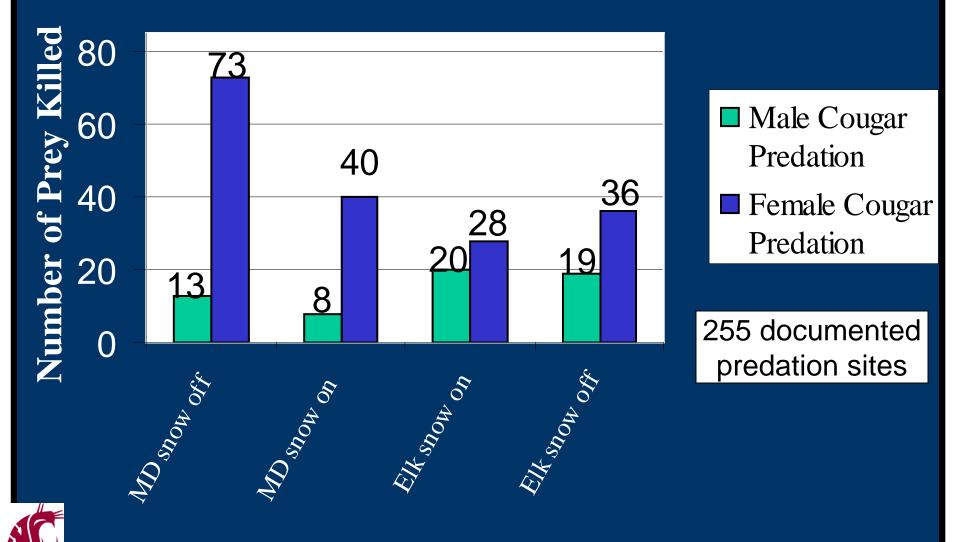


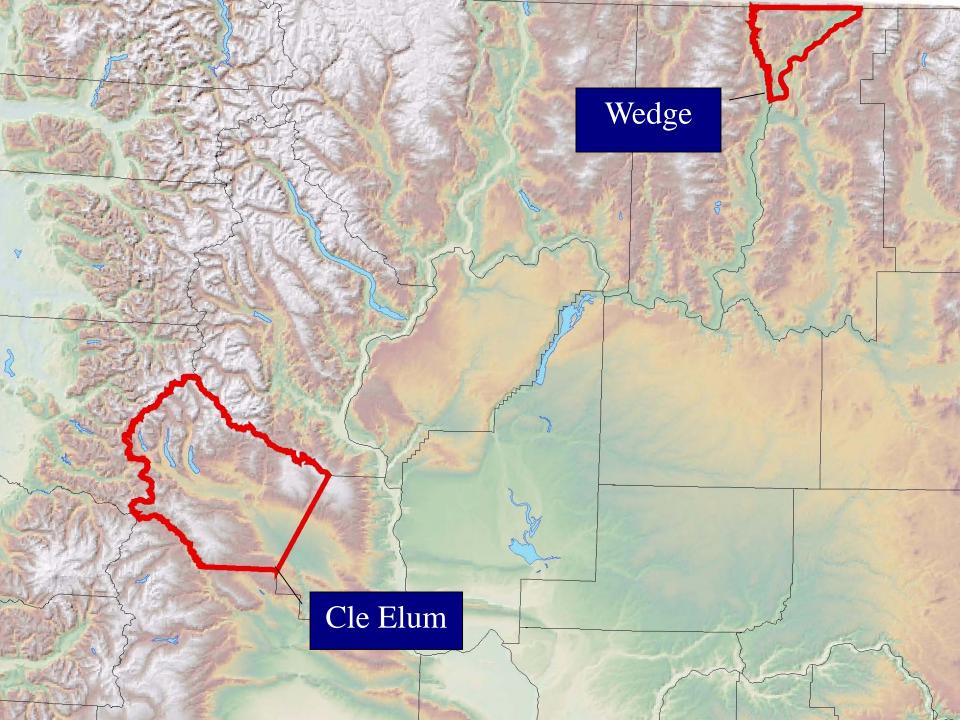
### 330 cluster GPS sites inspected





### Seasonal Cougar Prey Composition





### **Comparing County Statistics**

- Inder		Kittitas Co.	Stevens Co.
	Population	16.7/km <sup>2</sup>	17.4/km <sup>2</sup>
	Unincorporated	7.2/km <sup>2</sup>	13.4/km <sup>2</sup>
b	Land (sq mi)	2,297	2,478
	Harvest / 100 km <sup>2</sup>	0.23	0.45

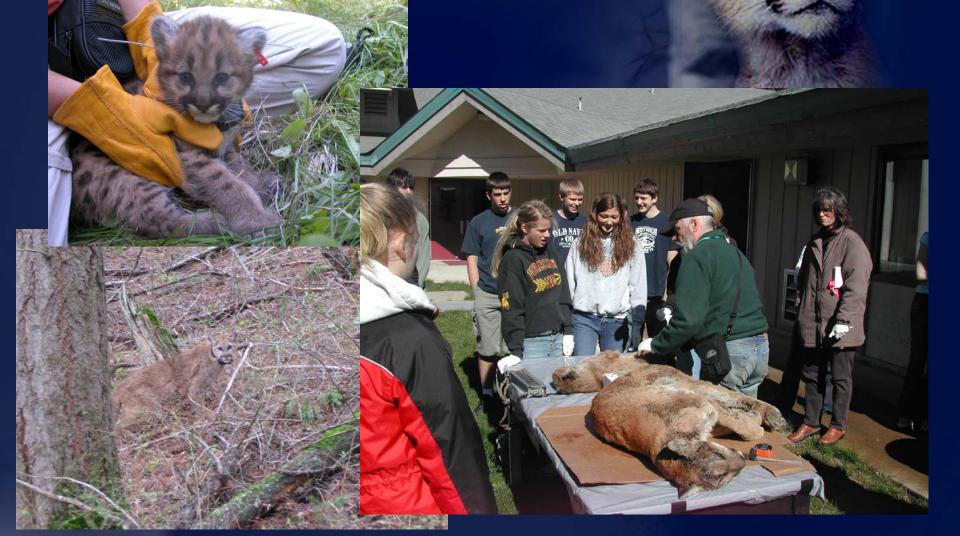
#### Cougar Incident Reports 2005-2008

	Kittitas Co.	Stevens Co.
Total Reports	23	127
Total Depredations	2	16
Unverified	14 (61%)	95 (75%)
Verified	9 (39%)	32 (25%)

Washington Department of Fish and Wildlife (Cougar Incident Reports database)

### Demographics & Kitten Survival





Demographics & Kitten Survival

Most survival rates in CE (71%) significantly higher than in KF (57%).

Modeled Stochastic Growth Rates suggest: CE is increasing (1.10), KF is strongly declining (0.73)

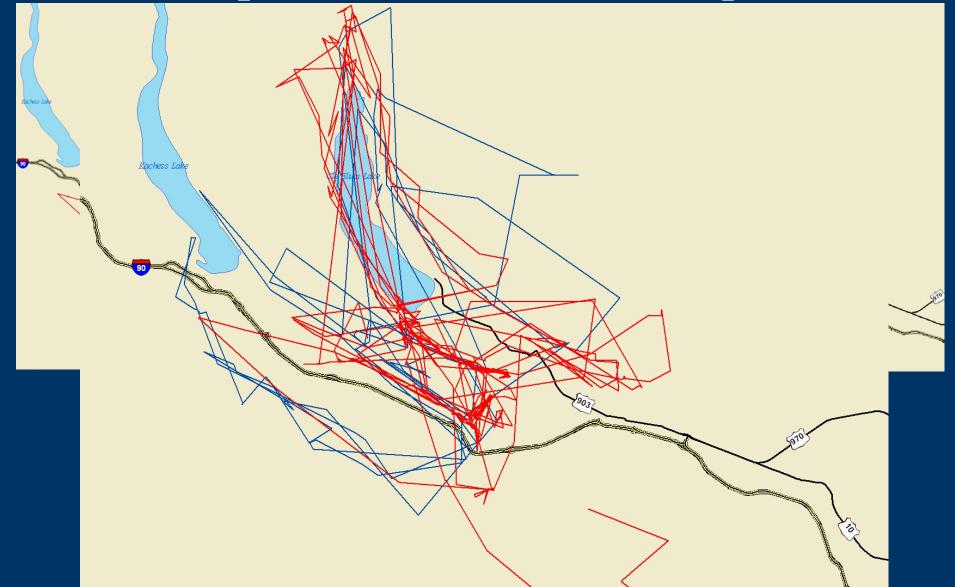
Observed Growth Rates suggests: CE is not increasing (1.00), KF is not declining as strongly (0.92)

The difference between growth rates suggests: CE Emigration Rate (0.10), KF Immigration Rate (0.19)

Age Structure is older and more stable in CE (41 months) vs. KF (27 months) (Hilary Cooley, unpublished data)

#### Male 154/154 Feb – Apr 2004

### Male 140/140 Feb – Apr 2007



#### Relation to Human Development

### GPS locations from 7 cougars 2001-2007

### Cougar 158158 Winter 2002-03

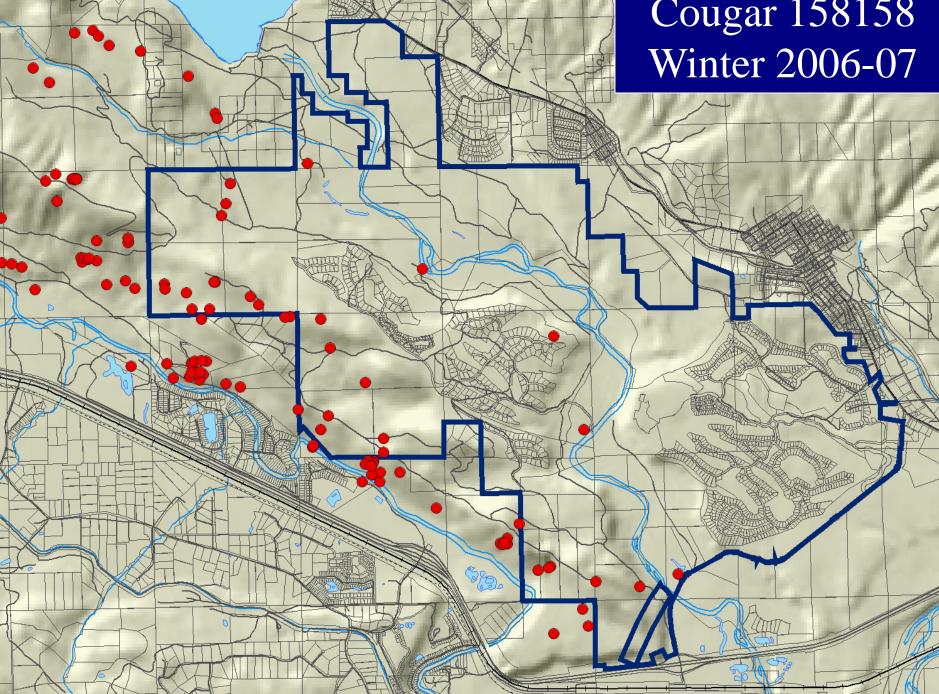
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### Cougar 158158 Winter 2004-05

Sme

3/2

### Cougar 158158



Thank you for your support!

Washington Department of Fish and Wildlife

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