

## The East Cascade Mule Deer Study Information

Last Updated: June 2009

- The five year study began in 2005 and will end in 2009
- Study Cost = \$3,000,000
- The portion of the study investigating deer migration across Hwy. 97 = \$114, 675 (funded by ODOT)
- A total of 279 mule deer have been collared (63 males, 216 females), as of June 2008
- 104 deer have been fitted with GPS collars to provide precise information on Highway 97 crossing locations
- The study area includes 100 miles of Hwy. 97 (from Bend to Sand Creek), and 50 miles of Hwy. 31 (southeast from the junction of Hwy. 31 and Hwy 97)
- More than 1000 road killed deer have been documented in the study area since summer of 2005. *For every dead deer documented in the roadway corridor, it is estimated that between 2 and 8 additional deer are hit and die away from the road. Since the summer of 2005 the loss of deer in the study area is estimated to be between 3,000 and 9,000 animals.*
- Within the 3 miles of the lava Butte to South Century Drive project it is estimated that 95 deer are lost to animal/vehicle crashes each year (*based on documented deer kills and an estimation of deer hit but not found*)
- Understanding how deer approach and cross the highway is an important step in identifying options to reduce deer/vehicle collisions.

The objectives for this portion of the study include:

1. Explore the relationship between the landscape and habitat features of the U.S. Highway 97 corridor (Hwy 97) and mule deer survival and migration patterns in central Oregon
2. Determine relationship between frequency, location, and time of day that mule deer cross Hwy 97, the daily traffic volume, and the location of deer-vehicle collisions
3. Determine relationship of mule deer activity and movements with land use conditions (especially associated with Hwy 97, residential development, road type and density, OHV activity, vegetative treatments, and other human related alterations to the landscape)

Other study objectives include:

1. Determine the habitat and landscape characteristics used by mule deer in central Oregon on an annual basis
2. Determine herd ranges and seasonal allocation of deer among Wildlife Management Units
3. Determine herd age structure
4. Determine female deer birth site habitat selection and associated habitat selection and survival of fawns
5. Document female mule deer fawning dates and fecundity
6. Determine adult mule deer survival rates and causes of mortality
7. Evaluate herd health
8. Use radio-collars to develop a model for population estimates
9. Test current and newly developed techniques and methods for providing accurate population estimates of mule deer in central Oregon

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### **Wildlife and Highways - Informational Websites**

<http://deercrash.com/Toolbox/index.htm>

<http://www.fhwa.dot.gov/environment/hconnect/index.htm>

<http://www.wildlifeandroads.org/>

<http://www.itre.ncsu.edu/cte/index.asp>

[http://www.wti.montana.edu/RoadEcology/documents/Wildlife Vehicle Collision Reduction.pdf](http://www.wti.montana.edu/RoadEcology/documents/Wildlife_Vehicle_Collision_Reduction.pdf)

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### **For Additional Information on the Mule Deer Study**

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