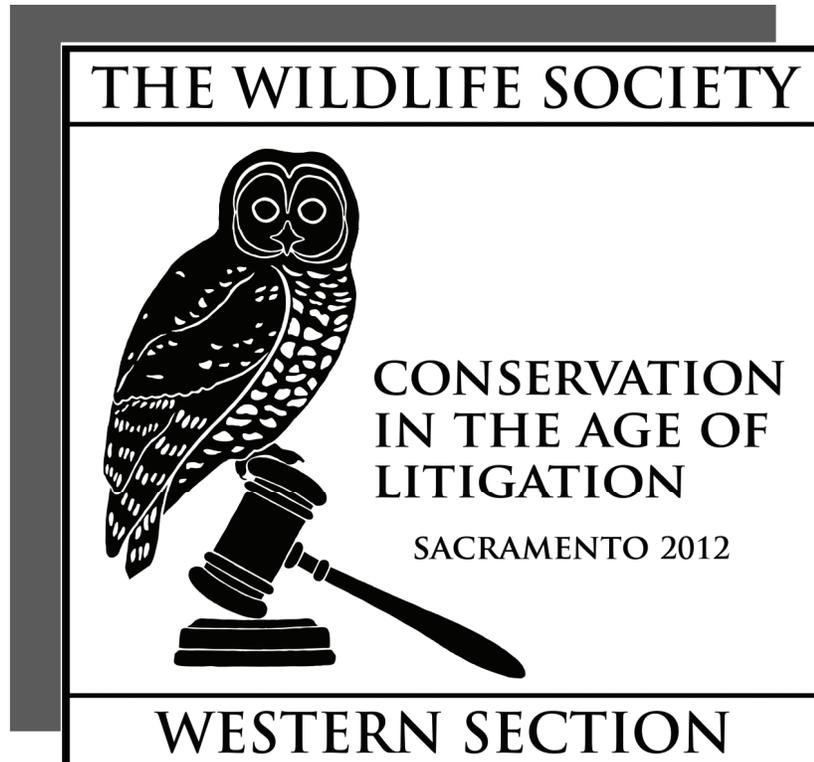


2012 Annual Conference

The Western Section of the Wildlife Society



Program and Schedule

February 1-3, 2012

Woodlake Hotel (formerly Radisson Hotel)

Sacramento, California

**EXPOSURE AND POISONING WITH ANTICOAGULANT RODENTICIDES IN CALIFORNIA FISHERS
(MARTES PENNANTI) INHABITING PUBLIC LANDS**

MOURAD GABRIEL, University of California at Davis, Veterinary Genetics Laboratory, Davis, CA, 95616, mwgabriel@ucdavis.edu; Co-authors: Leslie W. Woods, Robert Poppenga, Rick Sweitzer, Craig Thompson, Sean M. Matthews, J. Mark Higley, Stefan Keller, Kathryn Purcell, Reginald H. Barrett, Greta M. Wengert, Benjamin N. Sacks and Deana L. Clifford

Wildlife Diseases and Pathology

Fri, Feb 3, 4:05 pm

Abstract: Anticoagulant rodenticide (AR) poisoning has emerged as a significant conservation concern for wildlife. These toxicants are used primarily to suppress pest populations in agricultural or urban settings. As part of an ongoing collaborative effort investigating threats to fisher population persistence in the two isolated California populations, we initiated a disease surveillance program. Recently, we discovered that multiple fishers from these populations had died from AR poisoning. In order to assess the magnitude of this previously undocumented threat to fishers, we assessed AR exposure, the number that died directly due to AR poisoning, and conducted spatial analysis of telemetry data in an effort to identify potential sources of AR in the environment. We discuss the high rates of exposure to second-generation ARs, details of several AR mortalities, neonatal or milk transfer of an AR to an altricial fisher kit, and spatial data suggesting AR contamination is widespread within California fisher ecosystems. These toxicants not only pose a direct mortality or fitness risk to fishers, but could also pose significant indirect risks to these isolated populations. Future research should be directed towards investigating risks to prey populations, exposure in other rare California forest carnivores, and potential AR sources.