John W. Bickham

Oil, Water, and Wildlife: The Gulf of Mexico Disaster and Related Environmental Issues

The BP Macondo oil field spill in the Gulf of Mexico is the largest oil spill in U.S. history and has the potential to impact sea turtle and marine mammal populations, and others. This presentation will review the genotoxic effects of oil exposure in wildlife and discuss the potential for an oil spill to impact wildlife populations. Whereas some aspects of a spill are predictable, each spill is different because oils are highly variable, as are the environments in which they occur. The presentation will discuss what has been learned from previous spills, including the Exxon Valdez and the soviet oil legacy in Azerbaijan, and the potential dangers of offshore oil development in the Arctic. Related Purdue University research efforts in oil-spill related engineering and science also will be highlighted.

John W. Bickham is Director of the Center for the Environment, which is part of the Global Sustainability Initiative in Discovery Park, and Professor of Forestry and Natural Resources at Purdue University. He received a B.S. and M.S. in Biology from the University of Dayton, and a Ph.D. in Zoology from Texas Tech University. Dr. Bickham conducts research on the conservation genetics of marine mammals, the genetic effects of chemical contaminants on wildlife in Azerbaijan, and the molecular systematics of bats. He presently has grants and contracts from NSF, NOAA, and the North Slope Borough of Alaska. He has published more than 200 papers in peer-reviewed scientific journals, is co-author of the book Bats of Jamaica, and co-editor of the book Molecular Approaches in Natural Resource Conservation and Management. He serves on the editorial board of the journal “Ecotoxicology,” is past president of the Texas Society of Mammalogists and the Southwestern Association of Naturalists, and since 2002 has served as a member of the U.S. delegation to the Scientific Committee of the International Whaling Commission.

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