

I Don't Like Spiders or Snakes¹

Introduction and Scope

Any number of biological hazards may be encountered in the field. Some of the common wildlife present at DRI field locations are discussed in the DRI Wildlife Safety Guideline². Because DRI field research occurs around the world it is difficult to address all the situations that may occur. This guideline highlights additional biological hazards that may be present at field locations and should be considered as part of the hazard assessment and mitigation planning for field projects.

Biological Hazards

In addition to large or aggressive mammals, personnel may encounter a wide variety of biting and stinging insects, including bees, mosquitoes, ticks, fleas and flies; spiders; and poisonous snakes at field locations. Several diseases in the U.S are spread by biting insects, including, but not limited to West Nile and Eastern Equine Encephalitis (mosquitoes); bubonic plague (fleas), Lyme Disease (deer or western black ticks) and Rocky Mountain Spotted Fever (ixodid (hard) ticks). Also found in the U.S. are several human diseases that are spread by small mammals, such as rabies (primarily bats, but also raccoons and other wild carnivores); sin nombre (Hanta) virus (deer mice and kangaroo rats); white water arroyo (Arena) virus (wood rats); tularemia (rabbits); and it is expected that Avian Flu will soon reach the US bird population. Additionally areas infested with bat guano and bird droppings may contain fungus or bacteria that cause histoplasmosis and psittacosis (parrot fever) respectively. On a global scale, these diseases are but a drop in the bucket of those field researchers may face in other parts of the world.

Other biological hazards present at field locations may be due to plant life in the research area, such as sharp, spiny plants, plants with irritating sap, plants that cause allergenic, etc. All field research should take into account the kinds of biological hazards present at the field site what should be done on the project to prevent or mitigate these hazards.

General Guidelines for Avoiding Hazards from Pests³:

- Do not inadvertently attract pests. Keep field site clear of food residues and debris which might attract animals or insects. Keep garbage in rodent-proof containers.
- Thoroughly shake out bedding and clothing, including shoes, before using these items.
- Set up camp away from obvious nests or burrows. Use netting if necessary to keep pests at bay. Limit the use of lights at night.
- In areas where there are a lot of insects, wear long sleeved tops and long pants with pant legs tucked into boots. A neckerchief, hat and work gloves can help protect body parts not typically covered by clothing. Clothing should be constructed of tightly woven fabric.
- Before reaching into or entering areas (woodpiles, caves, etc.) where pests may live or hide, carefully look for them.
- Wear insect repellent and apply it frequently.
- Carry a first aid kit that includes bee sting antidote if anyone participating on the project is allergic to bee stings.
- Review first aid protocols for dealing with snake bites with all field workers before leaving for the field. See DRI's Rattlesnake Safety Guidelines for specific information about rattlesnakes.
- Seek immediate medical attention if bitten by a pest known to be poisonous, for a bite that doesn't heal properly or if you develop flu like symptoms in the week or two following the field work.

¹ From "Spiders and Snakes" by JIM STAFFORD and DAVID BELLAMY, Copyright 1973 and 1974 by Kaiser Music Co., Inc. Gimp Music and Boo Music.

² See DRI's Wildlife Safety Guidelines for additional information.

³ See the [USGS field guide section on animals](#) for additional information, including help on identifying dangerous spiders and snakes in the Southwest.