

LCZO/LTER Luquillo Experimental Forest (El Yunque National Forest) Safety Sheet

TASKS/PROCEDURES	HAZARDS	ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE
Walking and working in the field	Falling down, twisted ankles and knees, poor footing	Always watch your footing. Slow down and use extra caution around logs, rocks, and animal holes. Extremely steep slopes (>50%) can be hazardous under wet or dry conditions; consider an alternate route. Most of the soils in El Yunque are clay, which can be very hazardous when wet. Most of the rocks around streams are covered in algae, and can be hazardous even when they appear to be dry. Wear laced boots and/or non-skid Vibram-type soles for ankle support and traction.
	Falling objects	Wear your hardhat for protection from falling limbs and pinecones, and from tools and equipment carried by other crewmembers. Stay out of the woods during extremely high winds.
	Damage to eyes	Watch where you walk, specially around trees and brush with limbs sticking out. Exercise caution when clearing limbs from tree trunks. Advise wearing eye protection. Ultraviolet light from the sun can be damaging to the eyes; look for sunglasses that specify significant protection from UV-A and UV-B radiation.
	Bee and wasp stings	Watch for respiratory problems. Get person to a doctor immediately if there is trouble breathing. Gently scrape stinger off, if one is present. Apply analgesic swab and a cold pack if possible, and watch for infection. Flag the location of any known nests and inform other crewmembers. Advise packing an inhaler, Benadryl or Epi-pen if you are prone to severe allergic reaction.
	Mosquitos	Wear long sleeve shirts. Tuck pants into socks/boots. Use of repellent containing DEET or brand name products, such as Duranon, is recommended. Note Duranon is applied to clothing only, not directly to the skin. Please see the OSHA Zika guide lines for information about protecting yourself against the Zika virus.
	Heat Stress	Remain constantly aware of the four basic factors that determine the degree of heat stress (air temperature, humidity, air movement, and heat radiation) relative to the surrounding work environmental heat load. Know the signs and symptoms of heat exhaustion, heat cramps, and heat stroke. Heat stroke is a true medical emergency requiring immediate emergency response action. NOTE: The severity of the effects of a given environmental heat stress is decreased by reducing the work load, increasing the frequency and/or duration of rest periods, and by introducing measures which will protect employees from hot environments.
	Flash Floods	Many streams are very flashy, and can experience dangerous flooding. Even if it is not raining at your current location, flash floods can occur if it is raining upstream. If the water turns murky and starts to rise, get to higher ground.

General Safety

- Many places in El Yunque do not have cell service, such as the Bisley and Icacos watersheds. If you are going to be working in those areas, especially if you are going to be working alone, make sure you have an alternate method of communication. For example, ask about using Forest Service emergency radios.
- Muggings and robberies do occur in El Yunque, especially on PR-988, which does not see as much traffic as PR-191, the tourist road in the forest. Avoid walking on this road or leaving a car along the side of the road, especially if working alone.
- As always when working in the field, use common sense. Avoid dangerous situations, and always inform Geoff Schwaner and the Forest Service where you are going to be working.

Useful Contacts

Emergency 911

Luquillo Police Department Phone: (787) 889-1737

Rio Grande Police Department Phone: (787) 887-2020, (787) 887-2110

Sabana Field Research Station Phone Number: (787) 889-5335

El Verde Research Station Phone Number: (787) 764-0000 Ext. 4381

Miriam Salgado (USFS): msalgado@fs.fed.us

Carla López Lloreda (LCZO): carla.lpez09@gmail.com (787)-635-9347

Jess Zimmerman (UPR- El Verde): jesskz@ites.upr.edu

Grizelle Gonzalez (USFS IITF): ggonzalez@fs.fed.us

Bill McDowell (UNH, NSF, LCZO): Bill.McDowell@unh.edu