

Field Activity Risk Assessment - Potential Hazards Register

Field Activity: HGS - ESW 2011 - Geology and Fossil Field Trip - Panther Creek, Woodlands, Tx

Date: Field Trip: Oct 16, 2016

Site Name: Panther Creek - recent fluvial deposition processes

Safety Assessment: July 20, 2016

Potential Hazard	Probability of Occurrence				Comments Issues-Mitigators- Scenarios
	H	M	L	NA	
Natural Environment					
Temperature Extremes (Hot/Cold)		x			Request all bring water
Uneven/Slippery Walking Surfaces	x				Very slippery when wet, uneven surfaces, friable slopes, ~10' descent along a broken slope to best collecting layers. Outcrop runs for about 100 yards.
Sharp Objects—rocks, coral, vegetation	x				Old railroad ties, rails, garbage possible near bridge and trail down.
Heights/Drop-offs (inc. high elevation)	x				8-10 foot drop offs, slippery when wet
Falling Objects/Obstructions			x		Outcrop is friable and can crumble easily when dry. Very sticky clay rich section when wet - trips are easy.
Tight Spaces/Narrow Openings/Overhangs				x	
Darkness/Low Light		X			Trip (+setup) is 9-4 in daylight hours
Strong Sunlight (including sunburn)	x				Very likely
Foul Weather—wind, rain, snow, lightning, flash flood		x			All are possible in October
Fire Hazard	x				Everything is dry due to drought. If no rain before trip, No smoking allowed.
Smoke/Dust/Fog			x		High visibility, Depends on weather
Toxic/Allergic Sources (vegetation, pollen)	X				Normal outdoors allergens
Animals—Insects, Reptiles, Mammals, Other	x				Ants - big problem, bugs, snakes
Water/Current—streams, waves, tides, depth	X				River present, but no one allowed near
Man-Made Environment (for Pedestrians)					
Vehicular Traffic—Roads, Railroads			x		Hwy 21 and active railroad
Bridges	x				No one allow on bridge - all parking on south side of Hwy 21 bridge.
Fences	x				No crossing on to railroad easement or through fences - both private land.
Utility Lines				x	
Local Inhabitants (inc. hunters)	x				Fishing is popular, most stay on North side of river by bridge
Crowds/Spectators			x		If it becomes crowded, we can limit the number going down to outcrop with lectures at secondary stop up top at end of

Field Activity Risk Assessment - Potential Hazards Register

					dirt road. Participants without proper foot ware must stay at top.
Transportation (Auto, Boat, Air)					
Vehicle Condition (<i>safety equipment, mechanical, tires, etc.</i>)				x	Each volunteer and participant is responsible for finding their own transportation to/from the location.
Driver Qualification/Experience for location				x	Need to provide road signs to alert drivers nearing the site and where to park. (1 mile out each direction on HWY 21)
Route Conditions—rough (inc. flat tires)				x	Route is about 2 hours from Houston
Route Conditions—congestion				x	Maps provided on website as well as lat/long.
Route Conditions—winding, limited sight line				x	Large open area off the road available for sign in table set up and plenty of parking to keep people off the side of the highway.
Pedestrians			x		Limited to participants walking to/from cars. 20 to 100 yards from sign-in table.
Intersections/Railroad Crossings				x	A ditch with vegetation separates parking and sign-in from the railroad tracks. No barrier between highway and parking. Sign-in and lecture area protected by bridge railing and concrete barriers.
Human Factors/Participant Activities					
Hiking/Walking	x				1/10 mile - 1/2 mile total walking distance
Climbing			x		Climb up and down outcrop. Outcrop ranges from 10 to 20 feet of exposed section in field trip site boundaries
Lifting/Carrying		x			Sample collection - use backpacks, or sample bags. need to be able to climb around outcrop and carry samples
Swimming/Snorkeling/SCUBA/Boating				x	
Digging/Trenching	x				Volunteers will clean a type section on outcrop and have large shovels to also help secure trail and aid in collecting material.
Use of Tools (including chipping)			x		Participants should bring hand trowel and a brush to collect
Extended Immobility (auto, boat, air)				x	
Fatigue/Dehydration	x				Participants should bring water down to outcrop. Have extra water and first aid at Sign In
Food Handling			x		Snacks provided for Volunteers, trash must be taken out if

Field Activity Risk Assessment - Potential Hazards Register

					brought to outcrop
Language/Culture Differences			x		Provided in English only
Pre-Existing Physical/Medical Needs		x			Warn about exertion level in website and at sign in. Very difficult on knees and maintaining stability while standing on slope.
Separation of Individuals from Group			x		Clear boundaries will be described at safety review and volunteers will keep an eye out.
Lack of Rest Stops/Facilities	x				Nearest gas station/facilities 10 miles
Individual Behaviors Risk Acceptance			x		Sign in sheet and safety check and review with Scout leaders and others before letting them go down to outcrop area.
Equipment Failure				x	
Other Factors					
Limited/Remote Medical Services	x				10 + miles from nearest town, 20 miles to medical facility
Limited Communications			x		Cell phones work at outcrop and at top
<i>Additional Hazards identified by team?</i>					

Major Safety Points to Review with Volunteer Team:

- sturdy shoes
- water, hat, sunscreen, vest
- keep track of your tools and id charts don't leave them where others can trip.
- if someone needs first aid kit, get help from others and contact trip organizer up top.
- Cell phone works along whole site, everyone needs one, and phone numbers distributed.
- Messages can be relayed by people too.
- If someone is in need of emergency help - someone stay with injured, someone else call for help. Make sure trip organizer at top knows what is going on and can meet emergency help and send down first aid kit.

Major Safety Points to Review with Participants:

- remote site, no facilities
- bring water, hat, sunscreen
- wear sturdy closed-toed shoes - No Flip-Flops will be allowed down to outcrop.
- volunteers will be wearing reflective vests.
- stay within the boundries - west of HWY 21 bridge and end of outcrop 100 yards away. you should always be able to look back and see the bridge.
- watch out for ants, bugs, and snakes - drought conditions exist and you are next to the only water source for miles.
- stay out of the water and away from the banks - if you get in the water you go home!
- Main points to stress at site safety meeting: stay out of river, watch for ants, always be able to see bridge, have drinking water with you.