

## RISK MANAGEMENT PLAN



## APPENDIX A TO ACTIVITY RISK MANAGEMENT PROCEDURE

### SECTION ONE: ACTIVITY AND PARTICIPANTS

*Pursuant to the Trent University Activity Risk Management Policy, this form is to be completed by the Activity Coordinator and submitted to the Person in Authority prior to the start of a high risk activity, as defined in the Policy. Persons in Authority may set requirements regarding how far in advance of an activity the form must be submitted.*

**DEPARTMENT/UNIT:**

Anthropology

**ACTIVITY COORDINATOR:** Dr. Helen R. Haines

Email: [helenhaines@trentu.ca](mailto:helenhaines@trentu.ca) Phone: 905-435-5102 ext 5045

Belize Phone :

Emergency contact during field season: Jaime Yanes 011-501-661-0694

**CATEGORY OF ACTIVITY:**

Research

Hazardous Work

Academic

Other extracurricular

**ACTIVITY SUPERVISOR:** Same As Above

**DESCRIPTION OF ACTIVITY:** *(describe each component of the activity as per the Risk Management Procedure)*

Archaeological Field Research at Ka'Kabish Ruin, Belize. Includes the following activities:

1. Excavation into ground/plaza surface (use of hand trowels, hand picks, shovels, screens, lifting buckets of dirt);
2. Excavation of architectural façade(s);
3. Mapping excavation trenches (drawing wall profiles of buildings to map architectural sequences)
4. Surveying cleared fields (walking over somewhat uneven ground in cleared farmers' fields, collecting artefacts, mapping scatters of artefacts)

**Step 1a**

**Location of Activity:** off campus Ka'Kabish Archaeological Ruin, Belize

**Mode of Travel:** Travel to site will be in a pick-up truck

**Physical Activities:**

- Digging with hand trowels, hand-picks, and shovels; lifting buckets; shaking screen to sort artefacts; using tape measures to draw plan and profile maps; walking through forest environment; walking through cleared farmers' fields; washing and labelling artefacts.

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### Facility:

- all activities with the exception of washing and labelling artefacts will be conducted at the archaeological site of Ka'Kabish, Belize
- washing and labelling artefact will take place in the laboratory at the Lamanai Archaeological National Park, Belize, and/or the community centre in Indian Church Village

### Tools and/or Instruments Used:

- hand trowels, rock hammers, shovels, buckets, screens, Sokkia DT-6 theodolite & stadia rod, DH White level and stadia rod, tape measures

### Policies and Procedures in Place to Manage Activities:

- Student Guide issued prior to project commencement;
- tour of site to familiarise students with terrain;
- orientation lectures to establish rules and responsibilities first night and reviewed each week;
- assigning local people to assist and provide local forest knowledge and guidance;
- first aid kits issues to each operation area

### Training and Experience:

- Activity Co-Coordinator has 37 years of field experience of which have been in Belize, 16 of those at this site

### Step 1b

#### Natural Hazards

- Jungle environment
  - toxic animals (snakes, scorpions, tarantulas, and bees);
  - uneven ground;
  - Insects (mosquitos, doctor flies, botflies);
  - **EXTREME HEAT and HUMIDITY**

**LOCATION OF ACTIVITY:** On Campus (proceed to Risk Assessment Section)

**X Off Campus** (complete this section)

Country: \_\_\_\_\_ Belize, Central America \_\_\_\_\_

Geographical Site: \_\_Ka'Kabish Ruin, Orange Walk District, 17°48'58" North/ 88°43'47" West\_\_\_\_

Nearest City: \_\_\_\_Orange Walk Town, OW. District, 45 km away \_\_\_\_

**MODE(S) OF TRANSPORTATION**(check all that apply): For complete transportation information and restrictions, see Section 6.5 of the Activity Safety Policy.

**X private vehicle\*** Helen Haines, Insurance with Belize Insurance Company \_\_\_\_\_

Other (please specify)\*\* \_\_\_\_\_

☐ commercial carrier \_\_\_\_\_

\*Indicate the name of the driver. NOTE: University insurance does not provide coverage for private vehicles.

\*\* If a Trent owned or leased vehicle is used, all drivers must complete Drivers Agreement available on Risk Management Department website.

**13 + PASSENGER VANS ARE PROHIBITED UNLESS THEY MEET SCHOOL BUS STANDARDS.**

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<b>DATE OF DEPARTURE:</b> <b>ANTH 3000Y - Course:</b> 20 May 2023 <b>Graduate Students/Staff:</b> 15 May 2023		<b>DATE OF RETURN:</b> <b>ANTH 3000Y - Course:</b> 24 June 2023 <b>Graduate Students/Staff:</b> 1 July 2023	
<b>PERSONAL TIME(S) START:</b> <b>Course Work:</b> 7:00 am Monday-Friday; <b>Free time:</b> Saturday & Sunday free time <b>Long Weekend:</b> TBD		<b>END:</b> <b>Course Work:</b> 4:30 pm Monday-Friday <b>Free Time:</b> Saturday & Sunday <b>Long Weekend:</b> TBD	
<b>CHAIN OF RESPONSIBILITY:</b>  Helen Haines, Ph.D. Kerry Sagebiel, Ph.D. Alec McLellan, Ph.D. Cara Tremain, Ph.D. Jennifer Newton, Ph.D. Tamara Moore, Ph.D candidate James Bacon, M.A student Lara Curasev, M.A. student	<b>Supervisory Role</b>  Project Director Co-Director/Lab Director Field Director Field Director Osteology Supervisor Operations Director Survey Team Director Operation Director	<b>Trained First Aid (current)</b>  Yes No No No No No No No	<b>Other Special Training</b>
<b>NAMES AND STATUS OF PARTICIPANTS (ie. Faculty, staff, student, volunteer) Please List:</b> <b>Faculty/Project Staff (dates in Belize):</b> Dr. Helen R. Haines - Associate Professor, Department of Anthropology, Trent University Dr. Kerry Sagebiel - Assistant Professor (LTA) Northern Illinois University, Chicago Dr. Alec McLellan - TUARC Research Fellow, Field Director Archaeological Services Inc Dr. Cara Tremain - Langara College, British Columbia Dr. Jennifer Newton - Assistant Professor (LTA), Department of Anthropology, Trent University,  <b>Graduate Students:</b> Tamara Moore - Ph.D Student, Institute of Archaeology, University College London, UK James Bacon - M.A. Student, Department of Anthropology, Trent University Lara Curasev - M.A. Student, Department of Anthropology, Trent University  <b>ANTH 3000Y Students (20 May - 24 June):</b> TBD			

### SECTION TWO: RISK ASSESSMENT

1. List identified hazards associated with each component of the activity.
2. Determine risk score in accordance with the Risk Management Procedures.
3. Determine and list risk-control measures for each hazard that scores 7 or higher..
4. Calculate residual risk score.

Append additional pages as required.

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Hazard Identification	Risk Score	Risk Control Measures	Residual Risk
Heat Stroke and/or Dehydration due to tropical environment	$3 \times 1 = 3$	<p><b>Risk Prevention:</b> instruction on symptoms of heat stroke and dehydration; regular rest breaks; encouraged to drink water every 20-30 minutes; dissemination of Trent Heat Stress Plan Appendix B to ensure everyone aware of symptoms and treatment.</p> <p><b>Risk Reduction:</b> individuals never alone; shady rest area established; clinic able to provide treatment; supervisor has First Aid training</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university</p>	Low
Strains resulting from use of screens, and/or lifting buckets of dirt	$4 \times 1 = 4$	<p><b>Risk Prevention:</b> instruction in proper use of tools</p> <p><b>Risk Reduction:</b> assigning a local workman to assist with heavy lifting; first aid kit provided; supervisor has First Aid training</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university</p>	Low
Sprains resulting from walking on uneven ground	$3 \times 2 = 6$	<p><b>Risk Prevention:</b> orientation and tour of site</p> <p><b>Risk Reduction:</b> individuals never alone; first aid kit provided; supervisor has First Aid training</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university</p>	Low
Injury from Snake bite	$2 \times 3 = 4$	<p><b>Avoidance:</b> areas where removal of danger is not possible marked with caution tape and avoided</p> <p><b>Risk Prevention:</b> area is being monitored by local workmen in employment of landowner and dangerous animals killed; survey of site by supervisor and local workmen to remove any missed hazards prior to student arrival; orientation and tour of site clearing noting areas to be avoided if any;</p> <p><b>Risk Reduction:</b> individuals never alone; first aid kit provided; supervisor has First Aid training; local clinic has anti-venom</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university</p>	Low
Injury from Bee Stings	$4 \times 2 = 8$	<p><b>Avoidance:</b> areas where removal of danger is not possible marked with caution tape and avoided</p> <p><b>Risk Prevention:</b> area is being monitored by local workmen in employment of landowner</p>	medium

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		<p>and dangerous animals killed; survey of site by supervisor and local workmen to remove any missed hazards prior to student arrival; orientation and tour of site clearing noting areas to be avoided if any;</p> <p><b>Risk Reduction:</b> students instructed as to areas to avoid; students are instructed to be tested for bee-allergies; individuals never alone; first aid kit provided; supervisor has First Aid training; local clinic has medication</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university</p>	
Injury due to falling rocks	$2 \times 3 = 6$	<p><b>Avoidance:</b> areas deemed unstable are avoided</p> <p><b>Risk Prevention:</b> orientation and tour of site clearing noting areas to be avoided if any; students working in trenches issued hard-hats</p> <p><b>Risk Reduction:</b> individuals never alone; first aid kit provided; supervisor has First Aid training</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university</p>	Low
Death due to rock fall	$1 \times 4 = 4$	<p><b>Avoidance:</b> areas deemed unstable are avoided</p> <p><b>Risk Prevention:</b> orientation and tour of site clearing noting areas to be avoided if any; students working in trenches deemed stable and secure issued hard-hats</p> <p><b>Risk Reduction:</b> individuals never alone; someone always outside of excavation units (capable of summoning help); first aid kit provided; supervisor has First Aid training</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university</p>	Low
Allergic reaction/rash from local plants	$4 \times 1 = 4$	<p><b>Avoidance:</b> noxious trees and plants identified and avoided</p> <p><b>Risk Prevention:</b> education as to types of plants and trees that may cause reaction; site tour and orientation to identify areas to be avoided; instruction on symptoms of allergic reactions and rash;</p> <p><b>Risk Reduction:</b> first aid kit provided; clinic able to provide treatment; supervisor has First Aid training</p> <p><b>Separation:</b> in cases of allergic reaction individuals can be move to full time laboratory work away from forest</p> <p><b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts</p>	Low

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		responsibility for medical insurances, waives liability of university	
Illness (i.e., histoplasmosis) resulting from working in looters trenches	$2 \times 2 = 4$	<b>Risk Prevention:</b> instruction on how to work safely in environment <b>Risk Reduction:</b> use of approved 95N masks capable of filtering biological agents; Direct supervision by Dr. Newton; Careful monitoring of students for symptoms; <b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university.	Low to medium
10. DFAIT warning of crime rate in cities	$4 \times 1 = 4$	<b>Avoidance:</b> Project is not based in cities; live in small village of 200 people; crime rate low to non-existent <b>Risk Prevention:</b> students provided with links to DFAIT website & information on Belize <b>Risk Reduction:</b> travel to city for supplies done in groups and only during the day; students advised to never travel alone <b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university	Low
11. Delays due to hurricanes and heavy storms	$3 \times 1 = 3$	<b>Risk Prevention:</b> field work is scheduled in advance of hurricane season <b>Duplication:</b> students moved out of field and into lab for artefact possessing, illustration, and analysis <b>Transfer:</b> Signed Informed Consent Forms by participants acknowledges conditions, accepts responsibility for medical insurances, waives liability of university	Low

**EMERGENCY PROCEDURES:** Please see Emergency Procedures Checklist below.  
Detailed Emergency Plan for Activity location (communication and evacuation)

**Location:** Indian Church Village, Orange Walk District, Belize

**Village Phone:** 011-501-609-4651

**Alternative Contact:** Margaret Dyck, 011-501-323-0241

**LOCAL CONSULATE OFFICE:**

Consulate of Canada  
80 Princess Margaret Drive, Belize City, Belize

Tel.: (501) 223-1060

Fax: (501) 223-0060

E-Mail: cdncon.bze@btl.net

**Postal Address:**

P.O. Box 610, Belize City, Belize,

**Hours:**

9 am - 2 pm, Monday - Friday

**NEAREST EMBASSY:** Guatemala City

**Street Address**

Edyma Plaza Building, 8th Floor,  
13 Calle 8-44, Zona 10,  
Guatemala City, Guatemala

**Tel:**

(502) 2363-4348

(502) 2365 1250 (Immigration)

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<b>Postal Address</b> Embassy of Canada Apartado Postal 400, Guatemala, C.A.	<b>Fax:</b> (502) 2365 1210 (General) (502) 2365 1211 (Political)
<b>Hours of operation</b> Monday to Thursday: 08:00 - 17:00 Friday: 08:00 - 13:30	<b>Email:</b> General: gtmia@international.gc.ca
<b>University Contacts and Phone Numbers (people at Trent who are designated as emergency contacts for the field party):</b>  1. Anthropology Admin. Assistant	<b>Local Contacts and Phone Numbers (contact information for the field party):</b>  1. x 7825

### SECTION FOUR: APPROVAL

I certify that I have reviewed the above Activity Risk Management Plan and:  
Approve the Plan

**Name & Title (Person in Authority)**

Dr. Helen R. Haines, Senior Lecturer, Department of Anthropology,  
KARP Project Director



\_\_\_\_\_  
Signature