
**University of Wisconsin Whitewater
Implied Consent Statement for Research Involving Human Subjects**

Consent to Participate In UW-Whitewater Approved Research

Title: Identification of Fire Risk in Outdoor Conditions by Ecological Staff in Private Industry

Investigators:

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Description:

We are investigating the ability of ecological staff to identify potential fire hazards in their work. Primarily, we are focusing on those individuals that complete bat surveys throughout the eastern United States. We are also attempting to assess each individual's basic understanding of fire and fire behavior.

For the purpose of this study, the attached survey has been designed with written scenarios and photographs displaying real-life work being conducted in-field. In addition to the scenario-based questionnaire survey, a survey questionnaire based on S-290 course testing information from the National Wildfire Coordinating Group is also attached to assess each individual's understanding of basic wildland fire behavior.

The aim of this survey is to assess the understanding of fire risk associated with outdoor work. It is directed as part of the questionnaire instructions and will be assumed that outside sources will not be used by individuals involved in these surveys.

Once all surveys are gathered and scored, the data will be examined, and scenarios and knowledge that are frequently missed will be focused on and explored. Any short-comings will provide insight for future fire safety training specifically targeted for ecological staff.

Risks and Benefits:

The direct benefit of this study is to provide safety management teams a better understanding of ecological staff knowledge of fire safety. This study is aimed specifically at ecological staff that work on bat surveys in the eastern United States, and highlights fire risk in realistic scenarios. The results may be useful for safety management personnel when planning safety trainings for these ecological staff.

Special Populations:

No people classified as members of Special Populations will be used in this study.

Time Commitment and Payment:

All survey questionnaires must be returned no later than 11:59 PM on 31st of March, 2017. Participation by each subject is entirely voluntary, and compensation is not provided.

Safeguarding the Identity of Participants:

Results of survey questionnaires will be scored and the results retained in Microsoft Excel. The individual identities shall not be included in the Excel spreadsheet; instead each individual's scores will be recorded as a subject number (i.e. S0001, S0002, etc). The data will be used solely to gain a better understanding of general areas of fire safety that may be overlooked by company safety trainings. No individual will be directly identifiable from the data. All completed survey questionnaires will be retained for three (3) years per Federal requirement on different servers/computers which are secured within the UW-Whitewater network or via UW-Whitewater Google Drive.

Many precautions have been taken to ensure the security and privacy of your responses, however online communications, in general, are considered public in nature. As this research is conducted in a public education setting, electronic records may be subject to open records requests. In addition, as an online participant in this research, there is always a risk of intrusion by outside agents such as hacking, and therefore a risk of being identified.

Right to Withdraw:

Your participation in this study is entirely voluntary. You may choose not to participate without any adverse consequences to you. However, should you choose to participate and later wish to withdraw from the study, there is no way to identify your anonymous document after it has been turned into the investigator.

IRB Approval:

This study has been reviewed and approved by The University of Wisconsin-Whitewater's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

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Statement of Consent:

By completing the following survey questionnaire, you certify that you are at least 18 years of age, and you agree to participate in the project entitled, "Identification of Fire Risk in Outdoor Conditions by Ecological Staff in Private Industry".

Instructions: Please read the following scenarios. In scenarios 1 - 5, please provide the potential fire hazard(s), if any are present, in the space labelled Potential Fire Hazard(s) following each of the mentioned scenes. For question 7 – 9, please circle the best response to the scenarios listed. Do not use any outside material to answer the questions.

Please return completed survey materials no later than 11:59 PM on 31st of March, 2017. **Once finished, please return to DammJP14@uww.edu.** Thank you.

1. 2 August: Jonathan and Tina travelled to their study area. Daytime temperature reached 95 degrees Fahrenheit, and there has been a light breeze of about 2 to 3 miles per hour all day. Once they arrived at their site, they had to steer off-road to get to their exact location about one-half mile away in the middle of a pasture. They drove to their site, and parked at the base of a hill. From there, they carried their equipment to set up near their vehicle. After they had finished setting up, they sat near the truck. Tina lit a cigarette.

Potential Fire Hazard(s)

2. 24 May: Jonathan and Tina parked their truck and had to walk into their site from a dirt road to the north. It was about 52 degrees outside. Jonathan brought a propane heater to have at the site. They set up their site at a forest edge in an old hay field, and caught a target bat species at about 11:00 PM. After processing the bat, they prepared the soldering iron in order to place a radio transmitter to place on the bat. While preparing the transmitter, Tina had to go check the nets. When she got back, Jonathan had finished placing the transmitter on the bat and was walking away to place the bat on a tree limb about 50 meters away. She proceeded to begin picking up and putting all the equipment away.

Potential Fire Hazard(s)

3. 6 June: Jonathan and Tina got to their work site along a south-facing slope. Before reaching the site, they had a conversation with the landowner (they were within eye sight of him), who was having a backyard barbeque with his neighbors. The wind was blowing about seven miles/hour, and it had rained two nights prior. They began setting up their site.

Potential Fire Hazard(s)

4. 23 July: Timothy is working at a site. It is very hot out, and there is a light breeze. He is in a grassy field, installing bat boxes near the edge of a wood-line. He has been doing this since 10:00 AM, and it is now 2:15 PM. He is using an electric drill, which is plugged into a DC to AC converter in the truck. To do this, the truck is running. After he finishes his cigarette, he finishes drilling the front panel on and sets his drill down on the ground. He heads about 20 meters west to begin placing the boxes in the intended locations.

Potential Fire Hazard(s)

5. Identify fire hazards in photograph



Potential Fire Hazard(s)

7. 7 June: It is about 72 degrees Fahrenheit outside, with a light breeze. A small spot fire has ignited at the truck while John and Tina were checking nets. Neither of them has had training with fire extinguishers, but there is one in the truck, and at present it is safe to retrieve. The fire is spreading quickly due to the breeze, and at present is in a grassy area near a hill. Should John and Tina evacuate the area or try to extinguish?
- Yes
 - No
8. 10 July: It is about 72 degrees Fahrenheit outside, with a light breeze. A discarded cigarette began to ignite surrounding grass. The grass is very wet, and it is keeping the fire from spreading too quickly, although it is spreading. John begins successfully stepping out parts of the fire, although it is still spreading slowly in other areas. Should he continue, or should he and Tina evacuate the area?
- Continue
 - Evacuate
 - Continue, but be prepared to evacuate
9. 11 July: John and Tina have just pulled up to a site along a grassy slope. It is very dry, and about 90 degrees Fahrenheit outside. Wind is about 6 miles per hour. They are not in phone service range, and they are approximately 15 minutes from adequate service range. A spot fire is started. Tina grabs the fire extinguisher and begins discharging immediately. It empties, and the fire has grown very quickly. There is a second fire extinguisher present, as well as a heavy wool blanket and a couple gallon jugs of water. What should they do?
- Use second extinguisher near the downwind front of the fire
 - Evacuate immediately
 - Use a combination of water, extinguisher and blanket to put out the rapidly-spreading fire

Instructions: Please read the following questions. Please provide either a short response in the blanks provided or circle a response if multiple choice. Do not use any outside material to answer the questions. Once finished, please return to DammJP14@uww.edu. Thank you.

1. List the three general elements that must be present and combined before combustion can occur and continue.

2. Heat transfer (the ability of fire to move) can occur by any of three ways. List these three processes of heat transfer.

3. List three types of weather variables that can influence fire risk and fire behavior.

4. Topography can influence fire spread rates. Fire will spread more quickly when moving (choose one):

- a. Uphill
- b. Downhill
- c. On flat ground

5. If a fire reaches a point at which it is no longer controllable, list three general “safe zones” for evacuation.

6. Approximately how long will a typical fire extinguisher work?

- a. About 45 seconds
- b. 5-10 seconds
- c. 10-25 seconds
- d. 25-45 seconds