

2018
Southeastern Bat Diversity Network
Bat Blitz

PARTICIPANT GUIDE



Southern Cumberland Plateau
Sewanee, TN
July 23-27, 2018

OVERVIEW

Location

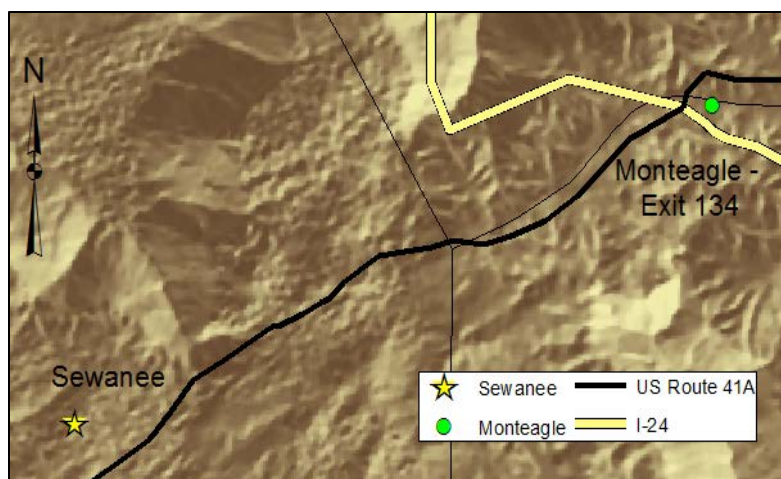
Southern Cumberland Plateau, TN
Franklin County, TN

Housing and meals based at:

The University of the South

735 University Ave, Sewanee, TN 37383

<http://www.sewanee.edu/>



Arrival/Departure

<All times are central daylight savings time>

Start: Monday, July 23rd, 2018 at 6:00pm (meal and social)

While the Monday night social is optional, for planning and financial reasons, we request that you please plan to stay for the duration of the blitz, Tuesday – Friday morning.

End: Friday, July 27th at 12:00 noon

Bat Blitz Headquarters

The headquarters for the Blitz will be University of the South's Cravens Hall. Registration, meetings, WNS decontamination and information on other activities will occur here.

Location: Cravens Hall

435 Kentucky Avenue, Sewanee, TN 37383

35.196425, -85.925741 (WGS84 - google map coordinates)

Registration/Check-in

Monday, July 23 3:00pm – 6:00pm

Tuesday, July 24 8:00am – 11:00am

T-shirts available at check-in

HOUSING

Sleeping arrangements

Two different dormitories will be used during the blitz. The facilities of the university are great. Dormitories are air conditioned and each room has two twin beds. We will make every accommodation possible to give you your room preference. Each housing complex has an outside common area and one has an outdoor fire pit.

Smith Hall - <http://www.sewanee.edu/student-life/residential-life/residence-halls-and-other-campus-residences/residence-halls/smith-hall/>



Opened in August of 2013 as a co-ed residence, the dormitory will accommodate up to 90 participants sharing gender specific community bathrooms on each floor. Each room contains two twin XL beds. Bed linens and pillows are not provided. Please bring twin sheets or a sleeping bag.

Benedict Hall - <http://www.sewanee.edu/student-life/residential-life/residence-halls-and-other-campus-residences/residence-halls/benedict-hall/>



A co-ed residence hall built in 1963 constructed around a central, enclosed courtyard and can accommodate up to 92 participants. Rooms are gender-specific and composed of two double bedrooms adjoined by a central bathroom. Each room contains two twin beds. Bed linens and pillows are not provided. Please bring twin sheets or a sleeping bag.

MEALS

Three meals a day will be provided Tuesday – Friday morning at McClurg Dining Hall. Dinner on Monday will be provided at the social. Vegetarian and gluten-free options will be available at each meal, but if you have other dietary options, you should bring your own food.

- Breakfast is served daily at 10:00am
- Hot ‘Dinner’ is provided at 4:00pm
- A boxed lunch will be available at dinner for you to take to the net site, or eat it upon your return. Only light snacks will be provided following your return from nightly netting sessions.

SCHEDULE

Please note Sewanee, TN is in the **CENTRAL TIME ZONE**.

Monday, 23 July *If staying Monday night, please arrive at the blitz prior to 6pm.*

3:00pm – 6:00pm	Registration – Cravens Hall
5:00pm – 7:00pm	Public Events
6:00pm – 9:00pm	Social – McClurg Dining Hall Veranda

Tuesday, 24 July

8:00am – 11:00am	Registration/Check-in – Cravens Hall
11:00am – 12:00pm	Lunch – McClurg Dining Hall
12:00pm – 1:00pm	MANDATORY Team Leader Meeting – Cravens Hall
1:00pm – 2:00pm	MANDATORY Participant Meeting – Cravens Hall
4:00pm – 5:00pm	Dinner – McClurg Hall (<i>pick up boxed lunch after meal</i>)
5:00pm – 5:30pm	Sign-up for Team – Cravens Hall
5:30pm – 6:00pm	Team Meet-up / Depart Cravens Hall
6:00pm – 2:00 am	Mist Netting on the Southern Cumberland Plateau
2:00am	All participants must return nightly by 2am
	DECON

Wednesday, 25 July

10:00am – 11:00pm	Breakfast – McClurg Dining Hall
11:00am – 12:00pm	MANDATORY Team Leader Meeting – Cravens Hall
11:00am	Free Time – Activities optional
4:00pm – 5:00pm	Dinner – McClurg Hall (<i>pick up boxed lunch after meal</i>)
5:00pm – 5:30pm	Sign-up for Team – Cravens Hall
5:30pm – 6:00pm	Team Meet-up / Depart Cravens Hall
6:00pm – 2:00 am	Mist Netting on the Southern Cumberland Plateau
2:00am	All participants must return nightly by 2am
	DECON

Thursday, July 26

10:00am – 11:00pm	Breakfast – McClurg Dining Hall
11:00am – 12:00pm	MANDATORY Team Leader Meeting – Cravens Hall
11:00am	Free Time – Activities optional
4:00pm – 5:00pm	Dinner – McClurg Hall (<i>pick up boxed lunch after meal</i>)
5:00pm – 5:30pm	Sign-up for Team – Cravens Hall
5:30pm – 6:00pm	Team Meet-up / Depart Cravens Hall
6:00pm – 2:00 am	Mist Netting on the Southern Cumberland Plateau
2:00am	All participants must return nightly by 2am
	DECON

Friday, July 27

10:00am – 11:00am	Breakfast – McClurg Dining Hall
11:00am – 11:30pm	Awards – Cravens Hall
11:30am – 12:00pm	Check-out and Depart

PACKING LIST

Bedding, towels and toiletries are not supplied and you must bring your own pillow, bed linens, towels and toiletries. (Beds do not have pillows.) Beds are twin sized and participants should bring sheets for Twin XL beds as room assignments have not been made at this time.

FIELD EQUIPMENT

Please be sure to bring all equipment necessary for field work. Netting may require walking over rough terrain, across streams, carrying heavy loads, working in the heat and sun. Suggested items include:

Field clothing - Outer layer for decontamination, please see "Theme Night"

- Hiking boots/Rubber boots
- Waders
- Headlamp
- Water bottles
- Batteries
- Chair
- Rain gear
- Bugspray
- Sunscreen
- Hat

Poison ivy, mosquitos, deer flies and ticks occur in the forests and around the ponds and will be present day and night. Long pants should be worn for field work. T-shirts are fine for fieldwork but you may want to bring a long-sleeve shirt for additional protection if the insects are bad. Bring insect repellent! Two species of venomous snakes occur where mist netting will occur, timber rattlesnake and copperhead.

Remember that field clothing needs to comply with WNS protocols. (Please review the WNS protocol below) That is, you will be required to change into clean clothes in the field before re-entering the vehicle after netting bats. Bring enough clothing to make a change of outerwear each night in the field (no need to change your undergarments, only articles of clothing that were exposed to bats need to be changed.)

COMMUNICATION

Free wifi is available across the campus. Cell phone reception will be decent on campus, but will be poor at field sites. Verizon works best, AT&T is extremely spotty.

For emergencies call 911. The nearest hospitals to the park are:

If on or working in close proximity to the campus:

Southern Tennessee Regional Health System
1260 University Ave, Sewanee, TN 37375
(931) 598-5691

If working southwest of the campus, near Alabama:

Southern Tennessee Regional Health System
185 Hospital Rd, Winchester, TN 37398
(931) 967-8200

If working southeast of the campus:

Parkridge West Hospital

1000 Tennessee 28, Jasper, TN 37347
(423) 837-9500

THEME NIGHT

We encourage everyone to wear a themed outer layer of clothing every night.

Wednesday – Harry Potter

As you descend upon Sewanee you will leave the Muggle World and enter the Wizarding World as you arrive on campus! Break out your robes (actually worn by Sewanee students) and witching sticks to cast spells as you prepare to search for flying mini-dragons each night.

NIGHTLY SCHEDULE OVERVIEW

- Sign-up for Teams following Dinner at Cravens Hall
 - Please distribute yourself among team leaders
 - Note the leaving time listed by the team leader
 - While roles (e.g. experienced handler, data recorder, etc) do not have to be strictly followed, they allow us to assure the necessary skills are present.
- Decontamination
 - Assure you are ‘clean’ whenever entering a vehicle
 - You are responsible to decontaminate your personal gear
 - Help Team Leaders decontaminate communal gear such as mist-nets and ropes
- Bat Handling
 - Team leaders are ultimately in charge at net/trap sites
 - All handlers must be rabies vaccinated and have an acceptable titer reading in the last 2 years.
 - Gloves must be worn whenever handling bats

WNS DECONTAMINATION PARTICIPANT GUIDANCE

This year's blitz will be held in a confirmed White-nose Syndrome (WNS)/ *Pseudogymnoascus destructans* (Pd) positive zone. As responsible scientists we must do our very best to ensure we do not become the unwilling vectors of white-nose syndrome and that we maintain the highest integrity at our field sites. Participants in the SBDN Bat Blitz will comply with the national WNS protocol: <https://www.whitenosesyndrome.org/topics/decontamination>. In addition to that protocol, the following directions and guidance are stipulated. Summer decontamination procedures are known to limit the spread and exposure through equipment, and this document is designed to serve as clarification and guidance on the best practices for use during the bat blitz.

Required Decontamination Activities and Disclosure

- No gear previously used in a cave is allowed at the blitz.
- All gear and vehicles arriving at the blitz must be decontaminated prior to arrival. This includes: tubs (inside and out) that could have come into contact with Pd; poles; nets; scales; and ropes, etc. While the Blitz is in a WNS-positive zone, we seek to minimize the potential of introducing or moving other potential Pd strains.
- All gear, nets, poles, ropes, etc. leaving the blitz must be decontaminated. We will have decontamination areas (hot water baths and burners) at the blitz headquarters. Field clothing may be isolated, properly bagged, and decontaminated appropriately upon returning home, or it can be bagged on the field site prior to placement in a vehicle and subsequently discarded.
- All gear and materials used at this blitz--even subsequent to decontamination of gear--will be considered as equipment that has been used at a WNS-positive/Contaminated WNS Management Area site and **SHALL NOT** be used at an At-Risk WNS Management Area. Contaminated gear should only be used within an Endemic WNS Management Area or an Intermediate WNS Management Areas upon the direction of the responsible state/federal land management agency.
- All non-porous sampling gear (poles, stakes, bat processing materials) shall be decontaminated at the field site subsequent to use.
- All porous gear such as nets and rope (excluding personal clothing, see note) shall be decontaminated each night upon return to blitz headquarters. Mesh bags will be provided to team leaders and the porous gear shall be bagged in plastic at the field site and transported in plastic bags to blitz headquarters.

Decontamination Principles to Follow

Team leaders are solely responsible for overall operation of their net sites and implementation of field decontamination procedures. Some variation of field decontamination may exist between site leaders. When designing site control and field decontamination procedures, team leaders should always consider:

1. The safety of themselves and site personnel. Exposure to hazardous chemicals is a serious issue. Therefore, decontamination chemicals and methods of use should

always take into account the safety of site personnel. Choose chemicals and/or techniques that minimize the risk of chemical exposure. Follow all product labeling and methods for use.

2. The safety and exposure of bats to hazardous chemicals or field procedures that put bats at risk for injury. Materials that come into contact with bats should be free of chemicals.
3. The safe disposal and environmental fate of decontamination chemicals.
4. The security and longevity of field equipment and materials.

For Team Leaders—Decontamination Materials Provided by Blitz Organizers

1. Latex and/or Nitrile Gloves

- a. If latex or powdered gloves are used, notify field personnel who may have contact sensitivities.

2. Ziploc bags for phones and electronics.

3. Paper bat bags

- a. For holding bats, team leaders may use paper bags or properly decontaminated and chemical-free cloth bags. Paper bags will be available for use.

4. 70% Isopropyl Alcohol solution in spray bottles

- a. Use for decontaminating work up equipment (rulers, scales, etc), nets poles, chairs, tables, and other non-porous items.
- b. Can be used in conjunction with paper towels to form a ‘wipe’

5. Hot Water Decontamination At Blitz Headquarters

- a. Use for any soft gear that comes into contact with bats, to ensure bats are not exposed to hazardous chemicals.
- b. Use 55°C/131°F Water for 20 minutes.

6. Clotheslines for drying porous gear.

Suggested Field Practices for Site Control, Pd Isolation, and Field Decontamination

Setting up a Field Site and Preliminary Information

- Team leaders and participants should arrive at the site field-ready, with a change of clothes or an outer layer that can be shed prior to re-entering the field vehicle. Typically, a changing area at the field site is designated where changes of clothes are kept secure and dry in bags, including a change of shoes. Place spare plastic bags near your clean clothes so dirty clothes can be isolated and bagged once removed. Once clean clothes and shoes are put on, re-entry into potentially contaminated areas should be avoided. Therefore, all cleaned equipment should be loaded and the site “broken-down” prior to everyone changing into clean clothes.
- Prior to working in the field, consider disposable water bottles or expect that non-disposable bottles, along with coolers, will be decontaminated prior to re-entry into the field vehicle. Bring all drinks and supplies needed during sampling with you. Avoid

accessing the field vehicle during sampling to minimize risk of contaminating the vehicle. Anything brought into the field needs to be decontaminated before entering the vehicle.

- Designate plastic bags for trash and leave out extra bags for bagging of any gear ropes, nets, etc) that may need to be transported to the blitz headquarters for decontamination. (The blitz designates black bags for trash and white bags for decontamination)
- Ensure that chairs brought to the blitz are properly decontaminated prior to and subsequent to use. Non-porous chairs are advised for spraying down or wiping with isopropyl alcohol. Plastic folding chairs are durable, easy to decontaminate.
- Consider setting up a tarp as a drying and area to stage clean items such as poles and shoes that move from decontamination procedures to clean vehicles after site breakdown. Ensuring a clean space where hard, decontaminated items may dry eliminates dirt and debris on equipment and ensures adequate disinfection of Pd spores.
- Consider using mesh bags to hold individual mist nets. This makes post-sampling decon easier—nets can dry in the bags without having to stretch them out. A good source is here at about \$1 each: <http://www.papermart.com/net-shower-bag-with-loops/id=14330#14330>.
- Avoid processing any bats on the truck tailgate or near the vehicle. Use a non-porous table for field equipment and processing, as it can be easily sprayed or wiped. Park the vehicle an adequate distance from nets and bat processing areas to ensure the field vehicle remains clean.
- If possible, designate a “clean” person—who does not come into contact with bats—to enter data and retrieve any needed “clean” items from hard-sided tubs during netting. Keeping the processing table as clean as possible is the best method to avoid contaminating gear and/or data sheets.
- Do not use Lysol or Clorox wipes on your skin or hands—always use skin-safe products such as baby wipes. Do not apply Lysol or Clorox products to gloves or other items that may come into contact with bats.
- Consider placing your smart phone or other electronic equipment in clear plastic bags when not in use or text and read through the plastic bag. If accessing these items during mist netting and processing, ensure that hands are clean to avoid contaminating the electronic device.
- Consider using a clothesline to hang bagged bats to keep the processing table free of occupied bat bags and guano during processing.
- Properly-sized latex or nitrile gloves should be used when retrieving bats from the net and changed between bats. Note that team leaders or other handlers may deviate from this during situations where bats may be at risk of injury, such as multiple captures or during extreme entanglement. The bat’s well-being should always be given priority.

- A new, clean bag shall be used for each captured bat. No re-use of non-decontaminated bags. If a team leader opts to use cloth bat bags, they shall be decontaminated in hot water at night's end, at the blitz headquarters.

Site Break-down and Field Decontamination

- Systematically deconstruct net hardware and move toward centralized field decontamination area.
- Collect and centralize soft items such as ropes, bat bags, and clothesline and place in mesh laundry bags for isolated transport to hot water decontamination at blitz headquarters. Place mesh bags in plastic garbage bags and move to "clean" area for staging and transport.
- Place mist nets in individual mesh bags and place bags in mesh laundry bag for isolated transport to hot water decontamination center at blitz headquarters. Place in clean garbage bags and move to "clean" area for staging and transport.
- Spray or wipe all non-porous items (rings, poles, table, chairs) with isopropyl alcohol and place on tarp to dry.
- Load tubs with cleaned, non-porous processing gear. Wipe down outside of tubs and move to clean area for staging and transport
- As items are cleaned, designate "clean" people to load clean items into clean vehicle. Clean people who load the vehicle should change their clothes and begin loading clean items, as directed. Clean people should not come into contact with dirty areas or dirty equipment. Dirty clothes should be bagged for isolation, then moved to clean staging areas for loading and transport.
- As all items are loaded and site is in final stages, the tarp should be loaded, the garbage bagged, and the final field crew changes clothes.