

Beekeeping Safety Program

November - 2021

OVERVIEW

Abilene Christian University provides and maintains a safe and healthy environment. The health and safety of its employees, students, faculty, vendors, visitors, and our community is of the utmost importance.

This Beekeeping Safety Program has been developed to provide guidance to ACU faculty, staff, and students who participate in beekeeping activities and research.

POLICY

All staff, faculty, students, and contractors whose work is under the supervision of Abilene Christian University (ACU) shall comply with this program. Failure to comply with this program may result in disciplinary action up to and including termination. Any deviations from this beekeeping program must be reported to the Office of Institutional Compliance & Risk Management at risk@acu.edu or 325-674-2424.

References

[Texas Agriculture Code, Chapter 131: Bees and Honey](#)

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ROLES & RESPONSIBILITIES

Faculty/Staff

ACU employees shall adhere to the procedures and guidelines of this beekeeping safety program. Employees shall report any violation of this program to their immediate supervisor, management, or to the office of Institutional Compliance & Risk Management at risk@acu.edu or 325-674-2424.

Management

Management shall be responsible for the safe operations during all beekeeping activities and for ensuring that the procedures and guidelines of this beekeeping safety program are adhered to within their departments. Management responsibilities include, but are not limited to:

- Designate a head beekeeper for the hive(s)
- Maintaining training records
- Notifying the Office of Institutional Compliance & Risk Management prior to acquiring beehives
- Ensuring liability waivers approved by the Office of General Counsel are completed by all participants in beekeeping activities
- Maintain record of all liability waivers
- Reporting any incident, injury, or illness to risk@acu.edu or 325-674-2424

Divisions/Departments

All ACU divisions/departments that perform beekeeping activities shall follow the procedures and guidelines of this beekeeping safety program. Adherence to this program is of the utmost importance to the safety and well being of students, faculty, and staff.

Environmental Health and Safety Manager

The Environmental Health and Safety Manager is responsible for the review and maintenance of this program. The Environmental Health and Safety Manager's additional responsibilities include, but are not limited to:

- Review this program on an annual basis
- Provide health and safety guidance or recommendations

- Identify hazards and training requirements
- Investigate incidents, illnesses, and injuries as needed
- Provide support and resources for safety training, general safety, and guidance in the selection of equipment, including Personal Protective Equipment
- Maintain copies of training records
- Periodically inspect the site for adherence to this program

Head Beekeeper

- Ensure all participants are aware of the requirements of this program
- Maintain all training requirements of this program
- Notify all applicable departments of any changes to planned beekeeping activities
- Report any incidents or injuries to risk@acu.edu or 325-674-2424
- Notify ACU Police Department of the location of beehives (current or planned) in case of an emergency

Beekeepers

- Adherence to the requirements of this program
- Notify the head beekeeper of any incidents, stings, injuries, or illnesses

PROCEDURES

Placement of Beehives

Beehives may not be relocated from its current location without first obtaining permission from departmental management and the Office of Institutional Compliance & Risk Management.

Approval from departmental management and the Office of Institutional Compliance & Risk Management must be obtained prior to the acquisition of a beehive.

General Hazards

Beekeeping creates unique hazards that may not be found in other research settings. These hazards may include, but are not limited to:

- Stings and potential allergic reaction(s) to bee venom
- Sharps injuries from equipment or debris
- Occupational injuries (lifting, slips, trips, falls)
- Heat related illness (heat cramps, heat exhaustion, heat stroke)
- Burns and fire hazards (hazards associated with the use of a smoker)

Bee Sting First Aid

Bee stings are common when participating in beekeeping. The following is guidance on the varying types of reactions and symptoms of bee stings and what to do if you are stung.

Reactions & Symptoms

- Normal Reaction: Some pain, redness, itching, and swelling at the site of the sting
- Mild to Moderate Reaction: Persistent or spreading pain, itching or swelling, large or uncomfortable areas of pain, redness, itching or swelling, ongoing symptoms over several days
- Severe (Anaphylactic) Reaction: Abdominal pain or vomiting, difficulty breathing, swelling of the tongue, swelling or tightness of the throat, coughing, wheezing, difficulty swallowing, difficulty talking, dizziness

Sting Response

- Remain Calm
- Do not swat at the bees
- Leave the area
 - Remove yourself from the vicinity of the hive
- Move to a building or vehicle to treat the sting(s)
- Remove the stinger
 - Gently scrape the stinger with the edge of a plastic card (ID card, credit card, etc.). Do not use tweezers.
 - Do not delay the removal of the stinger
- After the stinger has been removed, wash the affected area with soap and water
- Oral antihistamines may be used to assist with persistent itching
- Antihistamine cream and ice can be used for itching and swelling
- NSAIDS for pain and swelling such as Ibuprofen
- If you have been prescribed an EpiPen, or any other form of adrenaline auto-injector, be sure to keep it on your person in case your symptoms worsen
- Antihistamines do NOT prevent or treat anaphylaxis
- If anaphylaxis symptoms occur, or have experienced a prior anaphylaxis reaction to a bee sting, do not delay calling 911.
- Call 911 if symptoms continue to worsen

Use of a Smoker

The use of a smoker is common practice in bee handling. Smokers are used to calm bees prior to handling a hive. The use of smokers creates a fire hazard and must be used with caution.

The minimum requirements when using a smoker are listed below:

- Prior to using a smoker, an ABC fire extinguisher, or a pressurized water source (water hose, etc) must be made available within 50 feet of the work site
- No one may use a smoker without training from the Head Beekeeper
- Only use dry fuel (such as paper).

- Begin with a small amount of material to establish the fire
 - More fuel may be added if necessary
- Not in use smokers must be maintained in a metal container away from all combustible materials (at least 35 feet)
 - Smokers should never be placed directly on combustible materials or dry grass
- The barrel of the smoker must be pointed away from the user at all times to prevent injuries (e.g. eye irritation, burns)
- The smoker must be completely extinguished upon completion of use
 - Dump smoldering contents into a bucket of water
 - Store smoker in a metal container
 - Always verify that the fire is completely extinguished

Signage

Signage must be posted in designated areas where beehives are present. The signage must be posted in a conspicuous location in public view at the entrance of the designated area to communicate the potential hazard of bees. Signage shall read:

“CAUTION: ACTIVE BEEHIVE: UNAUTHORIZED ENTRY PROHIBITED”

Liability Waiver

A [liability waiver](#) must be completed by all participants of beekeeping activities. The liability waiver shall be maintained by management of the applicable department. A copy of the liability waiver must be sent to the Office of Institutional Compliance & Risk Management at risk@acu.edu

Reporting Requirements

Employees

Employees must notify their immediate supervisor and head beekeeper immediately if an injury, illness, or any other safety related incident occurs.

The employee, supervisor, or head beekeeper must complete an [accident report](#) within 48 hours of the incident. The accident report can be found on the Office of Institutional Compliance & Risk Management intranet site.

Students

Students must notify their immediate supervisor and head beekeeper immediately if an injury, illness, or any other safety related incident occurs.

The supervisor or head beekeeper must complete an [accident report](#) within 48 hours of the incident. The accident report can be found on the Office of Institutional Compliance & Risk Management intranet site.

GENERAL SAFETY

The following precautions shall be used as general safety guidelines during all beekeeping activities:

Allergies

- Reactions to bee allergies can be fatal. Any person with a known bee allergy must seek medical advice from their primary care physician prior to performing beekeeping activities.
- Any person with a known or suspected bee allergy must notify the head beekeeper prior to performing any beekeeping activities.
- Any person with a known bee allergy must carry an epinephrine pen (EpiPen) prior to performing beekeeping activities. (EpiPens are prescribed to an individual. ACU does not provide EpiPens.)

Cell Phones

- A cell phone must be made easily available at all times when working with bee hives. Cell phones should be used in case of emergencies.

Wear Light Colored Clothing

- Participants in beekeeping activities should wear light colored clothing. Dark clothing and clothing with flowery designs are more likely to attract bees.

Avoid Wearing Fragrance

- Wearing fragrances should be avoided at all times when participating in beekeeping activities. Bees are attracted to fragrant scents which may include fragrance from: deodorant, shampoos, conditioners, soaps, or perspiration.

Use Proper Lifting Techniques

- Individuals should utilize proper lifting techniques prior to lifting boxes. Boxes can be heavy when filled with honey. Utilize a team lift with another person whenever possible.

EQUIPMENT

Personal Protective Equipment (PPE)

The following personal protective equipment must be worn while beekeeping in the research area:

- Beekeeping hat and veil
- Beekeeping gloves
- Light colored clothing
- Long sleeved shirt
- Long pants (tucked into socks)
- Close-toe shoes (open-toe shoes are prohibited)

Additional Equipment

The following equipment is required to be on hand prior to beginning beekeeping activities:

- Smoker
- Water extinguisher, an ABC fire extinguisher, or a pressurized water source (water hose, etc) within 50 feet of smoker
- First Aid Kit
- Cell Phone (The requirement of a cell phone is for Emergency Response purposes only)

TRAINING

Beekeeping safety training will provide understanding, knowledge and skills necessary to safely perform work or research around an active bee hive. Training will be required:

- Upon initial assignment of beekeeping activities
- When there is a change in assigned duties
- When there is a change in process or procedures
- When there is a change in equipment or PPE
- Upon request of departmental management
- Upon request of Abilene Christian University (ACU)

Refresher training will be conducted as needed or upon request.

For information regarding training requirements or to schedule a training, please contact Risk Management at risk@acu.edu or contact the Environmental Health & Safety Manager, 325-674-2424.

General Training Requirements

All individuals who participate or are involved in beekeeping activities, including research, must complete the following training requirements prior to beginning beekeeping activities:

- Beekeeping Safety Course
 - Smoker use and safety
- First Aid/CPR/AED with EpiPen Training
- Fire Extinguisher Training for anyone expected to use a fire extinguisher (The Environmental Health & Safety Manager can assist with setting up this training)
 - Fire Extinguisher training is an annual requirement
- Project specific training conducted by the head beekeeper
- Proper use of equipment and PPE conducted by the head beekeeper

APPENDIX

Appendix A

Contact Information

Emergency Services	
Name	Phone Number
<u>Hamby Volunteer Fire Department</u> Non-Emergency Emergency	(325) 668-8246 911
<u>Shackelford County Sheriff's Department</u> Non-Emergency Emergency	(325) 762-2000 911
ACU Medical Clinic	(325) 674-2625
Hendrick Medical Center North	(325) 670-2000

Abilene Christian University Employees	
Name	Phone Number
ACU Police	(325) 674-2911 (325) 674-2305
<u>Environmental Health & Safety Manager</u> Zach Harmon	(325) 674-2424
<u>Head Beekeeper</u> Riley Morrow	(325) 674-2401 (970) 689-0603