

# **Bats Project**

Prepared for: Boone County Conservation District

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## **Project Summary**

This semester, we worked with the Boone County Conservation District to build a platform for bat conservation and education. This involved a wide range of work, including bat data collection, creation of educational workshops and activities, and the creation of an informational bat brochure that can be used in workshops and conservation summer camps.

Bats are extremely important animals in ecosystems for a number of reasons. They are often misconceived as rabid pests, or with recent events have been partially blamed for the Coronavirus pandemic. However, bats play a vital role in ecosystems around the world, and it is important that we educate people about bat conservation. Bats are essential pollinators and spread flower or plant seeds, and they are also excellent pest controllers as they feed on mosquitoes and other bugs.

The Boone County Conservation District purchased acoustic bat monitoring equipment earlier this year to begin an ongoing bat data collection program in Boone County. Among the various equipment, there are acoustic microphones that can be placed in trees that will pick up bat calls. These readings can be run through a software program that identifies the species of bat making the call. We tested some of the microphones on birds and frogs, and the conservation managers have since set up the monitors at their homes to pick up calls. We discussed ways to make the bat monitoring program consistent and long-term and we talked about the possibility of creating data collection sheets. It will be easier for BCCDKY to run analyses on the data and draw conclusions if the collection process is consistent. It also might be useful if there are other factors involved, such as temperature, time of day, etc.

BCCDKY also has summer conservation camps and educational programs where they teach kids about conservation and wildlife. We decided to come up with activities and games for the kids to play to become interested in bats and protection of bats, which are outlined in ourActivities document. We also created an informational brochure about bats that covers their impact on forest health, bat myths, and other resources for bat conservation. With their ongoing bat research, we also created a document with information about bats and bat conservation for them to put on the website. We hope that our work from these projects is able to help BCCDKY in their efforts to promote bat education and protection within Boone County and its neighboring counties. We have enjoyed working with BCCDKY and hope that our efforts will be beneficial for them and the programs they offer to the public. In lieu of the state of the world at the moment, we hope that further bat research and education from BCCDKY is possible in the near future so that others may be educated on the benefits of bats.