

Tennessee Entomological Society - Required Submission Material for the Howard L. Bruer Award (Modified from the Southern Appalachia Science and Engineering Fair's Elements of a Successful Project)
<http://www.acad.utk.edu/sasef/stuinf02.html>)

1. Project Data Book. Detail the progress made with your project and be sure to list accurate and detailed notes.

Good notes show consistency and thoroughness to judges, and will help you when writing your research paper. Please do not send the entire Project Data Book. Instead, send digital copies of all or representative pages.

2. Abstract. After finishing research and experimentation, you are required to write a (maximum) 250-word, one-page abstract. An abstract should include the (a) purpose of the experiment, (b) procedures used, (c) data, and (d) conclusions. It also may include any possible research applications. Only minimal reference to previous work may be included. An abstract should not include: a) acknowledgments, or b) work or procedures done by the mentor.

3. Research Paper. A research paper should be prepared and available along with a project data book, and any necessary forms or relevant written materials. A research paper helps organize data as well as thoughts. A good paper includes the following sections:

- a) **Title Page.** Center the project title. **Put your name, school, contact information (mailing address and phone number) or any other identifying information on the title page.**
 - b) **Table of Contents.** Include a page number for the beginning of each section.
 - c) **Introduction.** The introduction sets the scene for your report. The introduction includes your hypothesis, an explanation of what prompted your research, and what you hoped to achieve.
 - d) **Experiment.** Describe in detail the methodology used to collect your data or make your observations. Your report should be detailed enough so that someone would be able to repeat the experiment from the information in your paper. Include detailed photographs or drawings of self-designed equipment. Only include this year's work.
 - e) **Discussion.** The discussion is the essence of your paper. The results and conclusions should flow smoothly and logically from your data. Be thorough. Allow your readers to see your train of thought, letting them know exactly what you did. Compare your results with theoretical values, published data, commonly held beliefs, and/or expected results. Include a discussion of possible errors. How did the data vary between repeated observations of similar events. How were your results affected by uncontrolled events? What would you do differently if you repeated this project? What other experiments should be conducted?
 - f) **Conclusion.** Briefly summarize your results. Be specific, do not generalize. Never introduce anything in the conclusion that has not already been discussed.
 - g) **Acknowledgments.** You should always credit those who assisted you, including individuals, businesses, and educational or research institutions. Identify any financial support or material donations received.
 - h) **References.** Your reference list should include any documentation that is not your own (i.e., books, journal articles). See an appropriate reference in your discipline for format.
- 4. By May 1,** submit digital copies of the project data book, abstract and research paper (and science fair poster or project, if available) to:

Dr. Patrick Parkman
parkman07@comcast.net
jparkman49@gmail.com

5. A response will be sent confirming receipt of the application materials. If you have not received a confirmation of your application within 2 weeks of emailing, please contact the TES Awards Chair. An Award decision will be made by October. A description of the Howard Bruer and other TES Awards can be found at <https://tes.tennessee.edu/awards/>