## Science & Technology ENTOMOLOGY

## LEVEL 2

Table of Contents	Rev. 09-20

	Table of Contents Rev. 09-20			
Projects & Materials	Requirements	Exhibit Requirements		
Youth Materials:  • Teaming with Insects Level 2 (#08441)  □ 2014  • ZSuites 4-H Involvement Report  • ZSuites 4-H Project Record Book  Volunteer Materials:  • Teaming with Insects Facilitators Guide (#08443) □ 2014  Classification materials: (available on website)  • Field Guide to Insects of North Americas (Eaton/Kaufman)  • Field Guide to Insects and Spiders (Evans)	Pre-requisites: Complete Entomology Level 1 (or approval of 4-H Professional)  Using the "Teaming with Insects" Level 2 curriculum booklet:  • Complete a minimum of 5 activities per year.  • Complete all 16 activities within 3 years to pass Level 2.  • Have your project helper date (month and year) and initial each activity when it is finished.  • Give an oral presentation (speech, demonstration or illustrated talk) related to this project.  Complete the following:  • ZSuites 4-H Involvement Report  • ZSuites 4-H Project Record Book  Note: See "Special Directions" at the end of the Entomology Section for more information about this project.	<ul> <li>ZSuites 4-H Project Record Book</li> <li>ZSuites 4-H Involvement Report</li> <li>1st Year: Collection of at least 15 insects, including 10 different insects you haven't exhibited before. Five insects should be mounted with card-point for display. At least 7 should be identified to family, including at least 3 orders. Use of ethyl alcohol to preserve.</li> <li>2nd Year: Collection of 20 adult insects and 5 nymphs (not necessarily the same as the adults collected), including 10 different insects you haven't exhibited before (at least 10 identified to family; including at least 5 orders). Use soft body preserving techniques.</li> <li>3rd Year: Collection of at least 25 insects, including 15 different insects you haven't exhibited before (at least 15 identified to family; including at least 10 orders). Include 1 incomplete metamorphosis (egg-nymph-adult) Use "Rearing Cage" Collection Method.</li> <li>OR <ul> <li>A report of things you have learned or researched (such as results of observations of insect traps, habitats, life cycle, entomology careers, etc.).</li> </ul> OR <ul> <li>A poster (14"x 22") or display relating to some activity in Level 2 (special equipment made such as a separator or extractor, arthropod collection, etc.).</li> <li>Collection: Exhibit boxes should be approximately 18" x 12" or 25 insects or 18" x 24" for 50 insects, and about 3" to 3 ½" deep. Boxes should be covered with a plexiglass/clear plastic lid that can be removed. All insects must be mounted, labeled and identified to order, and should be organized by order.</li> </ul> </li> </ul>		
Project Record Book  Volunteer Materials:  Teaming with Insects Facilitators Guide (#08443) 2014  Classification materials: (available on website)  Field Guide to Insects of North Americas (Eaton/Kaufman)  Field Guide to Insects and	<ul> <li>Have your project helper date (month and year) and initial each activity when it is finished.</li> <li>Give an oral presentation (speech, demonstration or illustrated talk) related to this project.</li> <li>Complete the following:         <ul> <li>ZSuites 4-H Involvement Report</li> <li>ZSuites 4-H Project Record Book</li> </ul> </li> <li>Note: See "Special Directions" at the end of the Entomology Section for more information</li> </ul>	nymphs (not necessarily the same as the adults collected), including 10 different insects you haven't exhibited before (at least 10 identified to family; including at least 5 orders). Use soft body preserving techniques.  • 3 <sup>rd</sup> Year: Collection of at least 25 insects, including 15 different insects you haven't exhibited before (at least 15 identified to family; including at least 10 orders). Include 1 incomplet metamorphosis (egg-nymph-adult) Use "Rearing Cage" Collection Method.  OR  A report of things you have learned or researched (such as results of observations of insect traps, habitats, life cycle, entomology careers, etc.).  OR  A poster (14"x 22") or display relating to some activity in Level 2 (special equipment made such a a separator or extractor, arthropod collection, etc.)  Collection: Exhibit boxes should be approximately 18": 12" or 25 insects or 18" x 24" for 50 insects, and about 3 to 3 ½" deep. Boxes should be covered with a plexiglass/clear plastic lid that can be removed. All		

County Requirements: Check with your County Extension office for more information.

**Support Materials:** Idaho 4-H Entomology page: <a href="https://www.uidaho.edu/extension/4h/projects/entomology">https://www.uidaho.edu/extension/4h/projects/entomology</a>
To order National 4-H Curriculum visit: <a href="https://shop4-h.org/products/entomology-curriculum-2-teaming-with-insects">https://shop4-h.org/products/entomology-curriculum-2-teaming-with-insects</a>
Facilitator Guide: <a href="https://shop4-h.org/products/entomology-curriculum-facilitators-guide">https://shop4-h.org/products/entomology-curriculum-facilitators-guide</a>

Optional Supporting Materials: All items accessible at https://www.uidaho.edu/extension/4h/projects/entomology

- Field Guide to Insects of North Americas (Eaton/Kaufman)
- Field Guide to Insects and Spiders (Evans)
- Preparing Insect Specimens for Exhibit (#82358)
- Bug Guide (Iowa State University)
- How To Make an Awesome Insect Collection (Purdue)