

Festival FEATURES, SUBJECTS, and SOLs

High School

FEATURE TITLE	SUBJECTS										SOLs (Biology, Chemistry, Earth Science, and Physics) & Other Notes	
	Agriculture/Forestry	Biology	Careers	Chemistry	Culinary	Earth Science	Ecology	Environmental Conservation	Human Health/Safety	Physics		Technology
EXHIBIT INFO & PHOTO GALLERIES												
Bugs: The Good, Bad, Big, and the Business		✓							✓			Short fact sheets on common pest species
Using Pesticides Safely	✓							✓	✓			Chemical safety, PPE, storage, infographics
Forest Entomology	✓	✓					✓	✓				BIO.6ac, BIO.7b, BIO.8e Native v. invasive; bio control
Bed Bug & Urban Pest Info. & The Good, Bad, and Ugly		✓	✓						✓			BIO.4d Photo galleries w/ images of insect pests
Ticks & Mosquitoes of VA		✓							✓			BIO.6
Close Encounters With Pollinators	✓	✓					✓	✓				BIO.8e Local pollinators
Entomo-3D (3D Insects)											✓	3D imaging process
"Bugology" at Virginia Tech	✓		✓									History of entomology at VT
The Poop on Bug Poop! (use with Bug Poop Matching Game)		✓					✓		✓			BIO.6
Entomophagy: Would You Eat an Insect?					✓				✓			Nutrition + cooking (recipe)
Wonderful & Fascinating Insects	Links to insect-related videos, activities, publications, art, and career information.											
Fruit Entomology	✓				✓		✓					Ag pests + cicada tacos
FUN FACTS & PUBLICATIONS												
Pollinator Garden Resources (for individuals and schools)							✓	✓				Interdependence, pollinator ecology, native plants
Honey Bees (PowerPoint)	✓	✓					✓					BIO.6a Social insects
Adventures With Insects (includes Insect Collection activity)		✓					✓					BIO.6 Arthropod classification and anatomy
Intro to Integrated Pest Mgmt. Reading the Pesticide Label Pesticide Storage/Disposal	✓							✓	✓			Pesticide safety
Bed Bug publications: Action Plans (8 pubs) Treatment/Prevention (6 pubs)			✓						✓			BIO.4d, BIO.7bc, CH.6b Biology; pesticide resistance; integrated pest management
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Bed Bug Biology and Behavior		✓					✓		✓			BIO.4d, BIO.6ac, BIO.7bc, BIO.8a
Spider Anatomy		✓					✓					BIO.6a
Orb Web Construction & Features		✓					✓			✓		PH.4
Why Are Orb Webs Sticky? (use w/ Orb Weaver video)				✓			✓			✓		PH.4, CH.6
Web Decorations							✓			✓		PH.4 <i>Stabilimentum</i>
Orb Weaving Spiders in Virginia		✓					✓					BIO.6, BIO.7, BIO.8e
Tick ID and Pathogens & Local Tick ID Sheet		✓					✓		✓			BIO.4def, BIO.6, BIO.8e
What About Bug Poop?		✓					✓					BIO.6a
Gypsy Moth	✓	✓					✓	✓				BIO.7b, BIO.8de
VIDEOS												
Bringing Nature Home in Small Spaces	✓						✓	✓				<i>Landscape design, native plants, pollinator ecology</i>
All About Bugs and Good Bugs	✓	✓		✓	✓		✓		✓			BIO.4def, BIO.7a <i>Bugs in food, agriculture, chemicals, medicine; classification.</i>
Bad and Big Insects	✓	✓				✓	✓		✓			ES.9a, ES.11ad, BIO.4def, BIO.7bc <i>Insect damage and disease; adaptations; fossils and early atmosphere</i>
What Can an Entomologist Do?			✓									<i>Jobs!</i>
Lari Larvae & Leuco Larvae	✓						✓					<i>Biological control species</i>
Growing <i>Verticillium</i> Across a Temperature Gradient		✓										<i>Growing fungus in a petri dish – research methods</i>
German Cockroach Assessment			✓						✓			<i>Urban pest control</i>
Bed Bug Egg 6-Day Timelapse							✓		✓			<i>1.5 minute video</i>
Bed Bug Feeding & Digestion							✓		✓			<i>Engorgement in action!</i>
Bed Bug Inspection/ID							✓		✓			<i>Videos in English & Spanish</i>
Bees Processing Honey	✓				✓							ES.6
An Orb Weaver Builds Her Web (use w/ Why Are Orb Webs Sticky? fun facts publication)				✓			✓			✓		PH.4, CH.6. <i>Will the fly escape? And how?</i>
The Most Dangerous Animal in the World		✓					✓		✓			BIO.4def <i>Biology, behavior, adaptations of mosquitoes</i>
Understanding Mosquito Behavior to Prevent Disease Spread							✓		✓		✓	BIO.def <i>Technology, pesticide resistance, research</i>
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Lahondere and Vinauger Labs									✓		✓	Technology, research
Mosquito Anatomy							✓		✓			Zoomed anatomy/function
Bugs and Wildlife: Part 1 & Part 2 (4 min. each)			✓				✓	✓				Interdependence, food web
Ferocious Hellgrammites!		✓					✓	✓				Aquatic ecosystems
Milkweed Bugs		✓					✓					Aposematic coloration
Ant Lions		✓					✓			✓		PH.4 Adaptations
Mabel – The Bug That Poops Candy	✓	✓		✓			✓			✓		BIO.6ad, BIO.7c, BIO.8, PH.4 Plant physics/chemistry
How Do Insects Poop?		✓					✓					BIO.6ad, BIO.7c
Tour the Hokie BugZoo (8 videos, 3-4 min. each)		✓					✓					BIO.5f, BIO.7c, BIO.8e, PH.4
Blatteria 1000 (cockroach races)												Just for fun!
12 Bug Words in Sign Language												Language
Periodical Cicada Appearances and Management	✓	✓					✓			✓		BIO.8, PH.4 (@ 3:28 min.)
Past and Coming Insect Plagues	✓	✓					✓	✓	✓			BIO.8 NEW insect pests in VA (@6:52 min. and 15:53 min.)
Spotted Lanternfly in Virginia	✓	✓					✓	✓				Biology, ecology, quarantine
ACTIVITIES												
Build an Insect Collection (individual or as a class)		✓					✓					BIO.1a, BIO.6a, BIO.8e Classification, field work
Invent an Insect		✓					✓					BIO.7c Anatomy, adaptations, habitat
Coloring/activity sheets: Rearing <i>Laricobius nigrinus</i> Emerald Ash Borer Tree ID & Biological Control	✓	✓					✓	✓				BIO.6a, BIO.7b, BIO.8de Biological control species
Pesticide Safety: Kids Only!		✓					✓		✓			BIO.6a, BIO.8e, CH.6 Integrated pest mgmt., pest ID, safety/disease prevention
The Honey Dance	✓						✓					Bee behavior
Anatomy of a Worker Bee & Research Different Bees (use w/ Honey Bees PowerPoint, a fun facts publication)	✓	✓					✓					BIO.6a
Identify These Mosquitoes (use with “All About Mosquitoes” fun facts publication)		✓					✓		✓			BIO.6a Using a dichotomous key
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Tick Crossword		✓							✓			BIO.4def
Pollinator Matching Game	✓						✓	✓				BIO.6a <i>Classification</i>
Preserve a Flower & ID Card							✓	✓				<i>Field techniques</i>
3D Insects (can be found under "Video" tab)											✓	<i>High def images you can rotate and zoom</i>
Insect Hotel for Pollinators	✓						✓	✓				<i>Can use rolled paper too</i>
Bee Day Cake Pops (recipe)					✓							<i>Cooking, recipe</i>
Bug Poop Matching Game (use w/ Bug Poop Photo Gallery)		✓					✓					BIO.6a
Grasshopper Pie (instructional video)			✓		✓				✓			<i>Cooking, recipe</i>