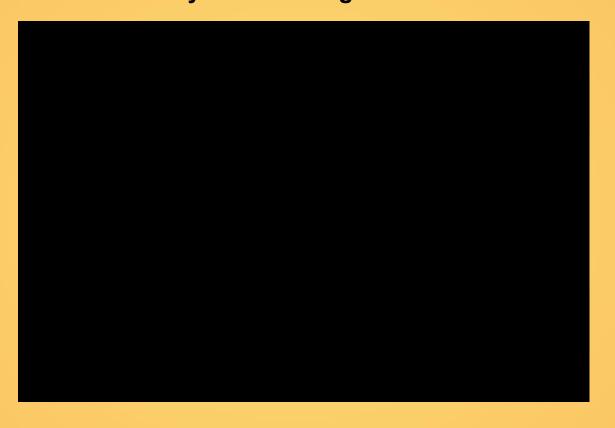
"I'm your worst nightmare..."



Hungry Pests Campaign

Leave Hungry Pests Behind



USDA Animal and Plant Health Inspection Service



Hungry Pests Campaign

Hungry Pests is the U.S. Department of Agriculture's signature outreach initiative to raise public awareness about the invasive pest threat. Its goals include:

- Elevating the issue of invasive pests among the general public
- Educating the public about the threats that invasive pests pose
- Increasing awareness about safe and effective solutions to combat them

The pests targeted by the Hungry Pests initiative are federally regulated invasive species whose introduction into the United States and spread within the country is assisted by the activities of the general public. These pests have the ability to cause significant harm to U.S. agricultural and environmental resources. Through the Hungry Pests website and outreach materials, the public can learn how to Leave Hungry Pests Behind.



Hungry Pests Campaign

The Hungry Pests Web site (<u>www.HungryPests.com</u>) includes:

- **The Threat -** Learn about the 18 Hungry Pests and the threat that they pose.
- The Spread / US Pest Tracker Check to see if your state has a federal quarantine--or could make a good home--for any of the 18 targeted Hungry Pests.
- What You Can Do Learn how the pests are spread, and the simple things that we can all do to leave Hungry Pests behind.

See How They Spread

Explore the top eight ways that Hungry Pests get around. Learn what you can do to help stop them.

REPORT A PEST



LEAVE HUNGRY PESTS BEHIND.

Invasive species threaten our trees and crops. There are simple things that we all can do to help prevent the spread. It's up to each of us to be sure we're not packing a pest. With your help we can protect so much that we value.

Hungry Pests Campaign Components

There are also resources for a variety of audiences, including:

Educator Tools:

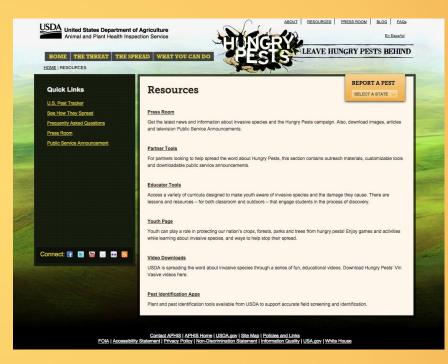
- Hungry Pests Invade Middle School curriculum
- Summer Camp Activities
- Videos, Pest Cards, EAB Nature Walk

Youth Tools:

- Interactive Infographic
- EAB Memory Game, EAB Investigator Trivia

Partner Tools:

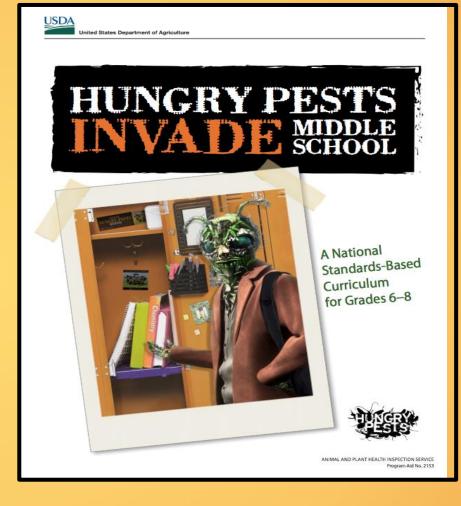
- PSAs
- Posters, Flyers, Brochures
- Social Media and Blog posts



Curriculum

The *Hungry Pests Invade Middle School* curriculum, designed to provide opportunities for student-led and student-generated work to actively engage middle schoolers with their environment and communities, launched in January 2015. This is the first curriculum created by USDA that focuses on all 18 Hungry Pests, and is aligned to national and State-specific standards.

Middle school students are fascinated with insects and the natural world. Plus, they're motivated to help make the world a better place, so targeting the curriculum to them is a perfect fit.



Curriculum

The curriculum includes 4 lessons. Each lesson deepens student knowledge of invasive species through close reading of relevant text, team research projects, interactive mapping activities and class reflection. All activities are student-centered and inquiry-led.

In addition, there are lots of fun extension activities to deepen student exploration and learning during class or to assign as homework. For example, students can make masks of Hungry Pests, create Wanted posters, draw a comic strip, or act like a journalist to report on a new Hungry Pest invading their area.

The "Hungry Pests Invade Middle School" curriculum is **free to download at www.HungryPests.com**, along with other free tools for educators, including an interactive infographic that can be used in an activity in the curriculum.



Lesson Overview:

Invasive species are a serious threat to our country and have the potential to devastate our crops and trees. This lesson will introduce to students the concept of invasive species. Students will begin to explore the damage and threat these pests cause and, most importantly, discover how invasive species can, or already do, impact their own lives and communities. Making the issue of invasive species relevant to students' daily lives expands awareness and provides personal and group motivation for more research, learning, and action—all of which will take place in Lessons 2, 3, and 4.

Topic:

Learning about invasive species: what they are, the threats they pose, and damages they can cause

Subject Connections:

Science, English Language Arts, Social Studies

Suggested Timing:

Four 45-minute class periods

- First Class—Pest Background Knowledge;
 Vin-troduction; Attack of the Invasive Species!
- Second Class—Invasive Species Executive Order
- Third Class—A Day in Your Life With Invasive Species; Why Should I Care?
- . Fourth Class-Exploring the Threat

Note: Extra class periods can be added to accommodate more time for research during the **Exploring the Threat** activity.

Supplies:

- Access to computer lab, computers, and Internet connection
- Chart paper
- Markers
- Teacher Handouts:
- 1. A Letter From Vin
- Exploring the Threat
- Student Handouts:
 - Attack of the Invasive Species!
 - 2. A Day In Your Life With Invasive Species
 - 3. Exploring the Threat

Preparation:

- Copy and cut out one set of the Exploring the Threat cards.
- · Make copies of the student handouts for each student.

- Download and print copies of APHIS' Attack of the Invasive Species factsheet at www.aphis.usda.gov/publications/ plant_health/content/printable_version/fs_attack_of_ the_invasive_species.pdf.
- Download and print copies of the invasive species Executive order (Executive Order 13112 of February 3, 1999) at http:// www.invasivespeciesinfo.gov/laws/execorder.shtml.
- Access the public service announcement (PSA), "A Lot of Mouths to Feed" on the Hungry Pests Web site (www.HungryPests.com/press-room/psa.php) or print A Letter From Vin.
- Access Hungry Pests and You, the interactive infographic game (http://www.hungrypests.com/ resources/interactive.php).

Learning Objectives:

Students will...

- Define invasive species during a group discussion.
- Understand the importance of (and our reliance on)
 U.S. agriculture and forests.
- Identify ways in which invasive species can harm agriculture and the environment and cause problems for people.
- · Analyze the various ways that invasive species are a threat.

Essential Questions:

What are invasive species?

What kind of threat do invasive species pose?

What kind of damage can invasive species cause? How do invasive species affect me and my State, community, and family?

Why are U.S. agriculture and forests important? How do I rely on them?

LESSON T

LESSON 1 - ATTACK OF THE INVASIVE SPECIES! WY

WWW.HUNGRYPESTS.COM



Curriculum

Along with the curriculum, a downloadable Standards chart is also available. Educators can easily find curriculum content by subject matter, lesson, or Standard. The curriculum is aligned to The Next Generation Science Standards, The Common Core State Standards for English Language Arts and Literacy and The Standards for Mathematical Practice, and National Curriculum Standards for Social Studies, as well as individual State standards for Florida, Pennsylvania, and Texas.

HUNGRY PESTS INVADE SCHOOL Education Standards	Pest Background Knowledge	Vin-troduction	Attack of the Invasive Species!	Invasive Species Executive Order	A Day in Your Life With Invasive Species	-	Ext: Vin's Vocabulary		Ext: Natural Resources Research: Wood Is Wood, Isn't It? Ext: What's Up With Wildfres?	Ext: Hungry Pests on the Prowl	Ext: No Pests Taste Test	Ext: #HungryPests	Wanted! The Pest Files	ts Detectives Timeline	Map It Out—Invasive Species in the United States Hungay Beets Re-Can		Z Ext: Make Your Own Vin Vasive	Ext: Who Am I? "Guess the Hungry Pests" Game	Ext: Be a Pest	Ext: Beetle Busters!	Vin Vasive's "Top 8 Ways I Spread" Pest Pathway Storyboards	_	Breaking News!	Wrap Up—3-2-1, Pests!	Ext: Hungry Pests Theater	Ext. Hunary Pests and Pathways	Seven Ways to Leave Hungry Pests Behind!	"Movers and Shakers"	Invasive Species Social Network	Taking Action!	Message Making	Spreading the Word!	Presenting: Hungry Pests! A Community Plan		Ext: Anti-Vin Vasive	Ext: Hungry Pests Herald	Ext: Real-World Research	Ext: Hungry Pests Jeopardy Ext: Plant Health Professionals
L.2: Demonstrate command of the conventions of standard			x	x	x >	ı x	Т	П	Т	Т	Т		x	Т	x >	T	Т	П	П		x	x	x	x	Т	Т	x	x	x	x	x	x	_x	Т	Т	x	П	\Box
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L.4: Determine or clarify the meaning of unknown and multiple-																																						
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vocabulary knowledge when considering a word or phrase																																						
important to comprehension or expression.																																						
The Standards for Mathematical Practice:	_		_							_								,								_	_											
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solve problems.					_	+	1	\vdash	+	+	-		4	_	_	+	+		\vdash		+	1				+				_	-	4	+	-	-		\rightarrow	+
6.SP.A: Develop understanding of statistical variability.					_	+	1		+	+	-		4	4	X	+	1	-	\vdash	4	+	1			_	-				_	4	+	+	_			_	\perp
7.RP.A: Analyze proportional relationships and use them to															x																							
solve real-world and mathematical problems. 7.SP.B: Draw informal comparative inferences about two					+	+			+		1		+	+	+	+	+				-				-	-		\vdash		-	-	+	+	-	1		-	+
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National Curriculum Standards for Social Studies:	_				_		_			_	_		_	_			_	_		_		_	_		_		_			_	_	_	_		_			
Time, Continuity, and Change		x	х	v	x >	(x	1		x x	X			x	х	x		1				x x	х	x				х	х			х	х	x					$\overline{}$
People, Places, and Environments		^	^		x /				* X					x	^	+					X X	×	^		-		×		x		^	^	^	+	-		-	+
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Stakeholder Engagement / Strategic Partnerships

National Agriculture in the Classroom

Hungry Pests Curriculum was added to National Agriculture in the Classroom website (NAITC); lessons are searchable on the National Agricultural Literacy Curriculum Matrix, and the complete curriculum is available on their website as a companion resource for teachers who want to teach this content as a unit. NAITC featured our curriculum as a "Featured Resource" on their homepage for the month of April (Invasive Plant Pest and Disease Awareness Month).



Interactive Infographic

The objective of this interactive infographic is the give users a visual and memorable understanding of the impact that invasive species can have on their everyday lives, and to inspire action to stop the spread of Hungry Pests.

The interactive brings the user through a typical day, including breakfast and lunch in their kitchen, afternoon in their garage, and time in the park. At each stage the user is asked to select items, and with pop-ups and quizzes, they see the impact that certain pests have on those items. By the end, the user can see how each item in the interactive is at risk.



Interactive Infographic









Engaging Youth to Lead to Behavior Change

With the Hungry Pests campaign, we're hoping young people will communicate the messages, and help stop the spread of invasive pests. In addition to talking about these pests with their peers, we aim to give them to tools to remind their families and communities about simple actions they can take to keep these pests from spreading.

Simple things like, cleaning tires and camping gear before and after a trip, not moving firewood, which can transport the hidden larvae of invasive beetles to new areas, and not bringing food, plant or animal products back from international travel, can all help with this goal.

The risks from invasive pests stretch well beyond agriculture and affect everyone. By giving community members the tools to share this message, we can help ensure that exotic insect pests are excluded from the local ecosystems, benefiting us all in the form of lower food costs, increased recreational value of public and private lands and protection of urban and rural landscapes.

Engaging Youth to Lead to Behavior Change

The Hungry Pests Web site makes it easy for any community leaders to download and share materials and the Hungry Pests messaging with their community.

By visiting the Resources section of the site, you can download press releases, media tools, videos, and social media copy to which can all easily be shared. There are also printables, such as posters, brochures, bookmarks, fact sheets, and more.

Tools from the site can also be customized for different audiences, and there are already some state-specific tools which are available for download.



Contact

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