

**Lesson 1: “Whowhatwhenwherewhy?”**  
*A Brain Drain*

**ENGAGE!**

**Overview:** Several different song and/or poem samples on the subject of invasive species are studied, as the students work in small groups to compile a bank of their current knowledge of “invasives”. All group input, correct or incorrect, is then displayed in a prominent location, to be updated throughout the duration of the ensuing unit. New vocabulary is identified.

**Objective:** The students will assemble and view all prior knowledge on the topic of invasive species. The students will generate a list of key vocabulary and questions for further research.

<b>Key Concepts:</b> Invasive species and term variants i.e.; exotics, non-natives, introduced flora and fauna, etc.
<b>Subjects:</b> Biology, Ecology, Language Arts
<b>Duration:</b> 1 class period (40 minutes)
<b>Setting:</b> Classroom
<b>Season:</b> Any
<b>Interdisciplinary Connection Frameworks:</b>

*Environmental Education @ the Cove River Site, and other coastal Connecticut settings.*



*Produced by the Graduate Students in  
Environmental Education EVE 546 Spring 2009*



For more information please contact:  
Scott M. Graves, 203-392-6604, [gravess1@southernct.edu](mailto:gravess1@southernct.edu)  
| Southern Connecticut State University |  
| Environmental Studies & Science Education | Jennings Hall |  
| School of Arts & Sciences |  
| 501 Crescent Street New Haven, CT 06515 |

**INTRODUCTION;** In this lesson the students will read creative pieces, and discuss each topic together as a group in order to pull prior knowledge, or any misconceptions, partial truths, and even solid facts. This will then be used to enter the unit of study with the same knowledge base, and to build upon it. The instructor does no teaching during this lesson, it is strictly meant to serve as a safe place for the students to explore what they may think they already know, may have heard, viewed and surmised, or have been secretly curious about, but have not yet been able to get a satisfactory answer to.

**BACKGROUND INFORMATION;** None needed for this lesson

**MATERIALS;**

- Several copies of different songs, poems, or other creative selections about invasive species
- Lined paper or journals
- Butcher paper roll
- Heavy tape/ duct tape
- Various bold colored markers, crayons

**PREPARATION;**

- collect and make several copies of the different poem/song selections that deal with the subject of invasive species (see suggested list in resources),
- spread the roll of butcher paper across one wall of the classroom and tape it up at eye-level,
- distribute markers/crayons below papered wall.

**PROCEDURE;**

1. Divide students into small working groups and distribute the copies.
2. Allow them several minutes to read through them, silently.
3. Instruct them to discuss the selections and then together compile lists of all ideas and any previous knowledge they may have concerning “what is an invasive species?” They can also include any new questions that may arise. All of these ideas can go on the lined paper, or in journals, as preferred by the instructor.
4. Once the thought flow in each group seems to be tapering off, have one or two representatives from each group at a time, come and write their ideas on the giant

papered wall. Encourage them to fill it with their ideas regardless of whether they feel they are right or wrong, or even if someone has a fragmented thought and needs to write it. They may sign their own work as in the sample below:

"I think species is a plant or animal-Sarah P."

5. Resist the urge to correct or instruct at this point. The objective is to pull all previous knowledge and move forward from there during the ensuing study.
6. NOTE: While this is going on, the instructor or another student can be making a list of all new vocabulary. Write these new terms and phrases both on a separate piece of paper and down one margin of the butcher paper. These words will then need to be divided up among the students (doubled up if needed) and defined for homework.

**CLOSURE:** Lead the class in a quick review of the activity, and come to a consensus on a few solid areas or ideas where the entire class has questions ie: agree on what they need to learn, or study, in order to fully understand what is an invasive species. The instructor can use this information to tailor portions of upcoming lessons.

**SUGGESTED FOLLOW-UP/HOMEWORK:** Evenly split the list of terms or phrases generated during discussion and have the students define them for homework. Share the results with the whole class, during the next class session, and agree upon a standard workable definition for each.

**RESOURCES and WWW LINKS:**

[http://www.greatlakeswiki.org/index.php/Professor\\_singing\\_the\\_blues\\_about\\_invasive\\_species](http://www.greatlakeswiki.org/index.php/Professor_singing_the_blues_about_invasive_species)

<http://windthatshakesthebarley.net/music-47.html>

<http://www.usadeepsouth.com/article1220.html>

Kudzu (poem by James Dickey)

<http://www.amyclampitt.org/poems/reedbeds.html>

"Invasive Species" song by Robert Resnik and Marty Morrissey

"The Return of the Giant Hogweed" song by the group Genesis

<http://www2.oakland.edu/english/farfield/faculty.cfm?ID=7>

<http://www.clarkcraft.net/jsclark/fiction/wisteria.html>

<http://www.highbeam.com/doc/1G1-134459087.html>

**Search Tip:**

Type in the string of a specific invading species' name + "song" or "poem" ie;  
"purple loosestrife poem" or  
"Asian shore crab song"

**PROVIDED RESOURCES/ etc:** see song poem sample to follow

**SHORT SAMPLES:**

### **Seductive Invader by Raymond A. Foss**

She was beautiful  
elegant, sly, alluring  
In her rich color  
long supple body  
full flowering  
envy of others  
less able  
to spread

August 17, 2005 19:27 – about Purple Loosestrife, invading all of New England's wet places

### **Nettles**

My son aged three fell into the nettle bed.  
"Bed" seemed a curious name for those green spears,  
That regiment of spite behind the shed:  
It was no place for rest. With sobs and tears  
The boy came seeking comfort and I saw  
White blisters beaded on his tender skin.  
We soothed him till his pain was not so raw.  
At last he offered us a watery grin,  
And then I took my billhook, honed the blade  
And went outside and slashed in fury with it  
Till not a nettle in that fierce parade  
Stood upright any more. And then I lit  
A funeral pyre to burn the fallen dead,  
But in two weeks the busy sun and rain  
Had called up tall recruits behind the shed:  
My son would often feel sharp wounds again.  
*Vernon Scannell*