**Unit Project: Ontario’s Invasive Species**

From time to time, a new species of plant or animal is introduced to Ontario’s ecosystems, either on purpose or by accident. Sometimes the new species dies off immediately, sometimes it fits in comfortably with other living things, and sometimes it multiplies uncontrollably and ruins existing ecosystems.

The plant shown at right is an invasive species, introduced to North America centuries ago by settlers from Europe. It has several uses – it is edible, it has certain traditional medicinal uses, and its seeds are an important food source for some species of birds. But, many people see it as nothing but a pest, invading their neat, green lawns and leaving a splash of yellow. Dandelions, then, are said to be an **invasive species**.

\* \* \* \* \* \*

The Ministry of the Environment for the province of Ontario has decided to fund the complete removal of one invasive species. Your job is to research the impact that one of these species is currently having on Ontario – or what impact it might have, if it ever reached our province – and make a case to your colleagues that *your* species is the worst of all, and deserves the funding for elimination.

Possible species: purple loosestrife emerald ash borer lamprey

 zebra mussels Asian carp kudzu

***Day 1: Research***

You will carry out research on invasive species, using print or online resources. You may want to organize yourselves into different roles for this day: lead organizer, researchers, creative director, fact-checker, or anything else you feel you need in order to keep the research on track.

***Day 2: Prepare Your Case***

Your group will take this day to create a short presentation (5-10 minutes in total), which will try to persuade the rest of the class that your species has the biggest impact. Consider the effects your species has on...

|  |  |  |
| --- | --- | --- |
| * businesses
* tourism
 | * air and water quality
* native plants and animals
 | * infrastructure
* human quality of life
 |

Because you will be competing against other groups, you may want to do some research on their species as well. Always try to “one-up” your competition!

***Day 3: Present Your Case***

The order of the presentations will be randomly chosen. You only have 5 to 10 minutes to make your case, so you’d better make a convincing sales pitch. Your presentation could be in the form of a PowerPoint/Prezi, a dramatic (or humorous) sketch, a piece of art, a lesson to the class, or any other format you choose. (If you’re doing something a little strange, please run your idea by your teacher first.)

At the end of all the presentations, you will vote for which one you find the most compelling case. (You cannot vote for your own species.) The winner of the “Worst Species” award will get a special prize.

You will be in groups of five or six, which will be randomly chosen. Not all group members need to be in the presentation; in fact, it would be awkward to have that many people presenting at once. But, you will have to evaluate how each of your group members (including yourself) contributed to the presentation.

Tentative schedule... Research Day \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Preparation Day \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Presentation Day \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

My species: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

My group members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluation rubric: (you will be given another one of these)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Criterion** | **Level R:****not present** | **Level 1:****present but inadequate** | **Level 2:****present and satisfactory** | **Level 3:****expected level** | **Level 4:****exemplary level** |
| Knowledge | Facts and terms are correct |  |  |  |  |  |
| Understanding of content is evident |  |  |  |  |  |
| Thinking | Using creative/critical thinking strategies |  |  |  |  |  |
| Communication | Effective expression of ideas |  |  |  |  |  |
| Presentation is suited for audience |  |  |  |  |  |
| Proper use of vocabulary/terms |  |  |  |  |  |
| Overall presentation skills |  |  |  |  |  |
| Application | Connecting science/tech/environment |  |  |  |  |  |
| Proposing a course of action |  |  |  |  |  |

Overall grades: K \_\_\_\_/20 T \_\_\_\_/10 C \_\_\_\_/20 A \_\_\_\_/20

Self/group assessment:

Use the following categories to assess the level of contribution of each of your group members, and yourself, during this project...

 0: none 1: little 2: adequate 3: excellent

|  |  |
| --- | --- |
| **Criterion** | **Students** |
| **Self** | **Partner #1:****\_\_\_\_\_\_\_\_\_\_\_\_** | **Partner #2:****\_\_\_\_\_\_\_\_\_\_\_\_** | **Partner #3:****\_\_\_\_\_\_\_\_\_\_\_\_** | **Partner #4:****\_\_\_\_\_\_\_\_\_\_\_\_** | **Partner #5:****\_\_\_\_\_\_\_\_\_\_\_\_** |
| Did this person contribute ideas and suggestions to the group? |  |  |  |  |  |  |
| How well did this person listen to others’ ideas and suggestions? |  |  |  |  |  |  |
| How well did this person carry out the task(s) assigned by the group? |  |  |  |  |  |  |
| Did this person do their fair share of the work in the group? |  |  |  |  |  |  |
| What was this person’s overall contribution to the project? |  |  |  |  |  |  |