**Application Form for Grades 10 - 12**

**Projects, presentations, materials and resources in Yukon Schools**

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| Application for: Projects, Presentations \_\_\_yes\_\_ Resources, Materials \_\_\_\_\_ |
| Agency/Department: Yukon Invasive Species CouncilDate of Submission: May 29, 2018Contact Name: Jennifer LinePhone Number: 867-668-7746Email: jen\_line@northwestel.net |
| Request initiated by: Jennifer Line (on behalf of the Yukon Invasive Species Council) |
| Title of project, presentation, resource or material:Invasive Plants (IP) of the Yukon: Taxonomy and Evolutionary traits for success |
| Grade | [Curriculum Subject Area](http://www2.gov.bc.ca/gov/content/education-training/k-12/teach/curriculum/english/) | Prescribed Learning Outcome |
| 11 | Science- Life Science | Students will study taxonomic principles for classifying IP, defining: taxa in the hierarchy; binomial nomenclature; how to use a dichotomous key of IP of the Yukon. Students will learn about the predominant IP families. |
| Students will learn about Process of Evolution-Living things evolve over time- successful life strategies improve survival& promote establishment in new areas. Students will address the following questions: Why do some plants become sosuccessful as invasive species? Why are so many invasive plants in the Yukon from one family (the Asterfamily)? |
| How will this presentation, project, resource or material enhance Yukon schools?This presentation will give hands-on Yukon-specific real-life examples for required curriculum. Invasive plant species are an excellent model for studying both Taxonomy and Evolution.Evolution: Evolutionary adaptation drives success and establishment of invasive species- we will review some of the characteristics and strategies that these plants have evolved to survive, establish and flourish in Canada and the Yukon.Taxonomy: Most of the most aggressive invasive plants in the Yukon are from one plant family (Asteraceae)- we will use a dichotomous key to identify dried plant samples to the species level and in so doing become familiar with the similarities of these plants (i.e. define the Aster family, among others).Invasive Species are the second biggest threat to biodiversity after habitat loss and impact agriculture, forestry and highway maintenance. We want students to be informed about the risks invasive species pose to our natural landscapes. We hope to inspire Ecosystem Stewards who can work to reduce the impacts of invasive species on Yukon’s natural ecosystems and for the health of future generations. |
| Please list and attach any professional review of this work.Jennifer Line, M.Sc. Botany, created this work. Jennifer taught the Introduction to Northern Botany course at Yukon College from 2004-2015. She has facilitated environmental education activities in Yukon elementary schools through Environment Yukon’s EnviroWild program (Remy Rodden, 2013-2018) [Trained as WildBC Facilitator 2013]. She has 25 years experience working as a botanist, including work for Environment Yukon (2005-2017). She was one of the founding members of the Yukon Invasive Species Council. |
| Any additional information that you would like to supply should be provided on separate pages.Attachments: Grade 11 Lesson Plan; Grade 11 Worksheet on Evolution; Dichotomous key to IP |
| Forward application to the Project Approval Committee: curriculum@gov.yk.ca |
| Department Resource Committee Review Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Approved: Yes \_\_\_\_\_ No \_\_\_\_\_Reasons if application is declined:  |
| Approved for:  |
| Restrictions, if any: |