**Unit Challenge Student Product Checklist**

**Unit 6.6**

# Student Product #1.

* Model of an Organism’s interactions (Done by individuals, started L2-revised L3-L6)

|  |  |
| --- | --- |
| Your Model Contains: | Yes/No |
| Abiotic resources required by the organism |  |
| Biotic Resources (prey) required by the organism |  |
| Predators (including herbivores for plants) of the organism |  |
| Competitors of the organism |  |
| Any mutualisms |  |
| Clearly stated ‘rules’ or *predictions* that explain how changing each component of the model affects your organism |  |
| Rule for Resources |  |
| Rule for Competition |  |
| Rule for Predators |  |
| Rule for Dependent Organisms (Mutualism) |  |
| Shows the relationship, and its relative importance when applicable, between the organism and the other parts of the model |  |
| Each component of the model is labeled and color-coded (Predators, competitors, etc) |  |

# Student product #2

* Invasive Species Prediction Chart (completed by teams in L07)

|  |  |
| --- | --- |
| Invasive Species Prediction Chart: | Yes/No |
| Has at least 10 predictions |  |
| All of your predictions are related to changes that could occur because of the introduction of the invasive species. |  |
| At least one prediction for each individual organism from your team. |  |
| Includes reasoning for each prediction that describes your organism as well as any predator, prey, plant, competitor, or resources involved. |  |
| Each prediction follows the rules described on your organism model |  |

# Student Product #3

* Team Invasive Management Decision Matrix (completed in L08)

|  |  |
| --- | --- |
| Decision Matrix Contains: | Yes/No |
| 3 criteria |  |
| Importance Values |  |
| Correct Scores |  |
| Properly calculated Ratings |  |
| An explanation using evidence of why their decision best meets the criteria |  |

Student Product #4

* Team Presentation

|  |  |
| --- | --- |
| Presentation: | Yes/No |
| Effectively communicates background information about ecosystem? |  |
| Effectively communicates:   * If the invasive can be prevented from coming to Michigan? * Ability to remove the invasive from the ecosystem. * Is the invasive likely to cause the disappearance of any native species? * Does the invasive directly affect humans? |  |
| Effectively communicates an argument about how an invasive species may cause some populations of organisms found in that ecosystem to change. |  |
| Arguments above are also supported from gathered evidence, like organism models and graphs/ charts showing patterns in how the relationship impacts populations |  |
| Present their proposed management solution and share reasoning and evidence (e.g. student product #3) |  |
| Communicates an argument, supported by a synthesis of organism models, about how an invasive species may cause the ecosystem to change. |  |

# Student Product #5

* Individual Invasive Priority Decision Matrix-

|  |  |
| --- | --- |
| Decision Matrix Contains: | Yes/No |
| Three criteria |  |
| Importance values |  |
| Correct scores |  |
| Properly calculated ratings |  |
| Answered question on the bottom in a CER format |  |