

A Report on Invading Species BELOW LEVEL 1

Teacher's Notes

The following is a list of characteristics found in student work that was submitted for this task and assessed at “below level 1”. (Samples of student work are not included.)

Degree of achievement can vary widely in student performance that falls below level 1. Consequently, the following list includes characteristics of achievement at various degrees below level 1. Taken together, some or all of the characteristics outlined below may justify assessment at “below level 1”. Most of the characteristics noted relate to the criteria specified in the task rubric, but some are more broadly defined.

Knowledge/Understanding

The student:

- does not understand the concept of an invading species;
- does not describe how the species has adapted to the environment;
- does not indicate relevant pre-adaptations;
- omits relevant characteristics of the invading species;
- provides inaccurate and/or irrelevant information about the invading species.

Inquiry

The student:

- does not identify and/or analyse the problem with the invading species;
- provides inaccurate, irrelevant, and/or insufficient details about the problem;
- omits the biotic and/or abiotic factors that may be affected by the invading species;
- does not consider the impact of the invading species on the environment and/or the human population;
- makes unfounded or unrealistic predictions about the future impact of the invading species;
- makes vague predictions that fail to convey the magnitude of the future impact;
- makes no predictions about the future impact of the invading species.

Communication

The student:

- provides inaccurate and/or incomplete tables/charts/graphs;
- presents data on irrelevant variables in the tables/charts/graphs;
- includes tables/charts/graphs that are incorrectly and/or incompletely labelled;
- provides tables/charts/graphs that are inconsistent with each other;
- provides tables/charts/graphs that are outdated;
- provides no tables/charts/graphs;
- writes a report that is poorly organized and difficult to follow;
- writes a report that is very repetitive;
- makes numerous grammatical and typographical errors;
- does not address the report to the Ministry of the Environment or Ministry of Health;
- expresses quantities in imperial measures, or omits units altogether;
- uses scientific terminology incorrectly or in ways that are not understandable;
- does not explain or define scientific terms that are specific to this problem.

Making Connections

The student:

- recommends a course of action that is superficial and that does not address the problem;
- recommends a course of action that is not consistent with the characteristics of the invading species;
- does not weigh the relative merits of possible courses of action;
- does not suggest ways of implementing the recommendation;
- does not recommend a course of action;
- provides an incomplete, confusing, or unconvincing justification for the recommendation;
- does not use scientific data to justify the recommendation;
- does not justify the recommendation.

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Comments

The student demonstrates little or no understanding of the task and/or the concept of an invading species. If several components of the task are not completed, or are scored below level 1, then the overall score will be below level 1.

Next Steps

In order to improve his or her performance, the student needs to:

- thoroughly review all requirements of the task;
- ensure that all instructions are carried out;
- review the concept of an invading species;
- include more details of the characteristics, pre-adaptations, and adaptations of the invading species;
- include a detailed analysis of the effects of the invading species on the human population and on biotic and abiotic factors in the environment;
- make detailed, realistic predictions about the future impact of the invading species;
- provide accurate, complete, relevant, and up-to-date tables/charts/graphs;
- write a well-organized report to the Ministry of the Environment or Ministry of Health;
- edit and proofread the report to eliminate errors and repetition;
- use scientific terminology correctly and explain unfamiliar terms;
- express scientific data clearly in appropriate units;
- weigh the advantages and disadvantages of possible courses of action;
- recommend an appropriate course of action to the Ministry of the Environment or Ministry of Health;
- use scientific data to justify the recommendation.