

Description: During the organizational meeting, you will be asked to list the type of invasive species you are most interested in (terrestrial plants, marine organisms, pathogens, etc.). Each of you will be matched with a species that has been targeted as a potential threat to Massachusetts or the New England region. Your goal will be to prepare a monograph for this species, using the list below and the topics covered in our course as a guide. You are expected to develop your report over the semester, and to use your research to participate in class discussions. At the end of the semester each of you will give a brief presentation summarizing your report and your conclusions about the threat your species poses to the region. The final report will be due at the end of the semester, 1 print copy and one electronic copy. Well-done reports (and I expect that to be **every one of them!!!**) will be submitted to the state and regional organizations that submitted the species lists to me.

Grading: This project counts for **35%** of your grade, to be broken down as follows:

- **20%** Completion of monograph, and support for your conclusions as to whether the species is a threat or not
- **5%** Clarity, usefulness and creativity (Assume this report is going to be read by state workers, conservation managers, and others who do not necessarily have a higher degree in biology)
- **10%** Presentation of your report and conclusions to class

Here is a starter list of requirements for your report. You should include these topics along with any that you believe to be important about your species and its status as an invasive.

History

- Where is it from?
- When and where was it (has it) been introduced?

Vectors

- List all known vectors and potential vectors of introduction and spread.

Invasiveness

- Is this species a nuisance anywhere, including its native habitat?
- What makes this species successful where it is a nuisance?

Impacts

- Ecological?
- Economic?
- (Don't forget, some impacts may be positive!)

Local Impacts

- Is this species a threat in New England (or will it be)? Why or why not? (Be specific, and do not be brief!)

Enemies

- Are there organisms, chemicals, or mechanical controls that are known to be effective against this species? What about natural enemies?

Molecular Biology/Genetics

- Is there any genetic work being done on this or related species?

Risk Assessment

- One of your homework assignments will be to run your species through a risk assessment, more details will be given about this later in the semester

References

- A literature survey is important both for people to check your facts and for people who want information beyond the scope of your report.
- What kind of research is being done right now on this species (or related species)?

Notes: All of the above information may not be available for your specific species. This is one of the issues stakeholders must deal with when assessing non-native species. If this is the case, take a look at similar species. If there is a lack of information about your species be sure to note it in your report.