Wrap-Up

Implementing Your Action Plan

1. Determine the criteria for classifying your chosen species as endangered.

2. Collect sample data. You will need at least three estimates for the population of the species. More estimates would be useful.

3. Formulate a hypothesis concerning the status of the species.

4. Perform a hypothesis test to decide whether the data indicate that the species is endangered.

5. Determine a confidence interval for the estimated population of the species.

6. Draw a conclusion about the status of the species. Does your analysis lead to any further conclusions? For example, can you determine whether a total ban on commercial exploitation of the species is justified?

7. Present your results, using appropriate technology.

Evaluating Your Project

1. Identify factors that could affect the validity of your conclusion, such as possible measurement errors or bias in your data.

2. Are there improvements you could make to the methods you used for this project?

3. If you were to update your analysis a year from now, do you think your conclusions would be different? Justify your answer.

4. Could you apply your data collection and analysis techniques to other endangered species?

5. Did your research or analysis suggest related topics that you would like to explore?

Suggested Resources

- Canadian Nature Federation
- Committee on the Status of Wildlife in Canada
- Sheldrick Wildlife Trust
- World Conservation Union (IUCN)

WEB CONNECTION

www.mcgrawhill.ca/links/MDM12

Visit the above web site and follow the links to learn more about endangered species.

Presentation

Choose the most appropriate method for presenting your findings. Your could use one or a combination of the following forms:

- a written report
- an oral presentation
- a computer presentation (using software such as Corel® Presentations™ or Microsoft® PowerPoint®)
- a web page
- a display board

See section 9.5 and Appendix D for ideas on how to prepare a presentation. Be sure to document the sources for your data.

Preparing for the Culminating Project

Applying Project Skills

In this probability distributions project, you have learned new skills and further developed some of the skills used in the earlier projects. Many of these skills will be vital for your culminating project:

- carrying out an action plan
- formulating a hypothesis
- using technology to collect data
- using sample data to test a hypothesis
- formulating and interpreting a confidence interval
- evaluating the quality of data
- critiquing research methodology
- presenting results using appropriate technology

Keeping on Track

At this time, your data analysis should be complete and you should have determined what conclusions you can draw from it. You should be ready to evaluate your culminating project and prepare a presentation of your results. Section 9.4 details questions you can use to guide your evaluation of your own work. Appendix D outlines techniques for presentations.

Refine/Redefine

Define the Problem → Define Your Task → Develop an Action Plan → Implement Your Action Plan → Evaluate Your Investigation and Its Results → Prepare a Written Report → Present Your Investigation and Its Results → Constructively Critique the Presentations of Others