

## 1999 Wisconsin Envirothon Oral Presentation Topic

### A Hypothetical Situation

The Karner blue is a small blue butterfly native to the sandy oak and pine community. Like many insects, the Karner blue is highly specialized; the caterpillars feed only on the wild lupine plant, which grows naturally on the sandy savanna. Native savanna was once quite widespread in Wisconsin, created and maintained by fires that prevented trees and brush from taking over and shading out the sun-loving savanna vegetation, including wild lupine. Most of our savanna landscape has now been lost through succession to forests in disappearance and fragmentation of its habitat has caused a dramatic rangewide decline of the Karner blue during the past 40 years.

Because the Karner blue has declined so dramatically throughout its range, federal listing of this butterfly was proposed and in 1992, the Karner blue was listed as Federally Endangered throughout its range.

The issue of land management while maintaining protection of the Karner blue has become very controversial. Environmentalists, farmers, forest owners, loggers, developers, and other individuals are very concerned, not only about the land use issue, but the economic impacts that are involved. Your presentation should be made as if you are offering your perspectives at one of the public forums being held around the state.

**You should present your proposed or recommended solution that will meet the needs of everyone involved and the information that supports your ideas.**

### Some things to consider:

One of the land management activities likely to result in significant mortality of the Karner blue is prescribed burning for prairie or barrens restoration and management. Fire appears to be quite lethal to Karner blue eggs and larvae (caterpillars) residing in the lupine and plant litter. Yet, at the same time, partial fire and other periodic natural disturbance seems necessary to maintain the Karner's open barrens habitat.

Permits may be required for such activities as partial prescribed burning, brushing-cutting or timely mowing when these actions are intended to promote the long term "propagation or survival" of the species. Other activities that may be affected by Karner blue listing include pesticide use, planting of pine plantations on barrens openings, and forestry practices that disturb or destroy lupine vegetation.

You and your team will have 10 minutes to present your proposal for meeting the needs of the public that is present at the forum. You may include maps, posters or other visuals. You will not, however, have access to audiovisual equipment and your presentation may not last more than your allotted time. The entire team must take part in the oral presentation. You may use any outside reference materials you wish.