

2025 Iowa Envirothon Competition – Presentation Scenario

Teams will analyze the given scenario, develop an action plan to address key issues, and deliver a **10–12 minute oral presentation** at the state competition. **New for 2025:** Teams may use a **PowerPoint or Google Slides** to outline their plan, but these should support the oral presentation—not replace it. No videos, sound effects, props, brochures, costumes, or other visual/digital aids are permitted.

Scenario Overview

A longtime family friend and neighbor has generously gifted your extended family around 58 acres of forested land, which borders your family’s Century Farm in southeast Iowa. Your family has enlisted you and your team to help guide decisions on how to manage this wooded property, as well as the surrounding farmland that shares the same watershed.

The 58-acre forested property consists mostly of upland terrain with moderate to steep slopes, along with a creek that runs through the plot, creating bottomland areas with gentle to moderate slopes. The land is bordered on three sides by your family’s farmland, which has historically been used for row crop production.

The upland areas are dominated by mature deciduous hardwoods native to the region, including White Oak, Bur Oak, Red Oak, White Ash and Shagbark Hickory. The bottomland, shaped by the creek, supports moisture-tolerant species including Silver Maple, Green Ash, Black Walnut, and Cottonwood. The woodland has remained unmanaged for decades, leading to a decline in native biodiversity and the spread of invasive species like Multiflora Rose, Honeysuckle, Buckthorn, and Black Locust. Additionally, forest health is threatened by the Emerald Ash Borer (EAB) which was first detected three years ago and its infestation has caused a significant decline in the health of all Ash trees. Reports also indicate the presence of Oak Wilt in the area, posing a risk to the oak-dominated uplands. Climate change has resulted in a higher average annual rainfall as well as more extreme rainfall events throughout Southeast Iowa.

A neighboring beef producer has inquired about renting the bottomland portion of the forested area (approximately 15 acres) for use for summer grazing for cows and calves including access to the creek for water. Several family members who live locally are involved in local food production and sell goods at local Farmers’ Markets. Several neighboring families depend on biomass for heating their homes. Additionally, there are also state and county parks with campgrounds in the vicinity which could present opportunities for collaboration and recreational use.

This newly acquired land offers a variety of challenges and possible uses. Consider ecological health (invasive control, disease management, wildlife impact), family & community needs (income generation, local food production, recreation) and long-term sustainability (forestry practices, agroforestry, partnerships) as you develop your plan for this site.

Issues to address:

- 1) What are the direct and indirect benefits of a 58-acre forest?
- 2) What are the major challenges in managing and sustaining this forest?
- 3) How have changes in this forest plot and the surrounding area likely impacted the local wildlife population? How will your team's management plan affect the local wildlife population?
- 4) What management practices and schedule would need to be implemented to stabilize and improve the entire woodland area?
- 5) What public and private organizations and programs could be leveraged to help in implementing your plan?
- 6) What agroforestry practices could be implemented to diversify this farming operation?
- 7) How could this forest generate income for the family?