

LEAF 9-12 FIELD EXPERIENCE

SCHOOL FOREST INVENTORY

- A1. **Geographic Information Systems** – In this lesson, students use a Geographic Information System (GIS) to study the regional geography of their school forest. Students use geography terms to describe aspects of their community and region. They study Platt maps and county records that illustrate the land use history of their school forest and surrounding parcels. Students then use fGIS to analyze geographic data and print a map of Wisconsin and their school forest region.
- A2. **School Forest Research Plots** – In this lesson, students work together to plan and establish research plots in their school forest. Students learn about statistical sampling by using a sampling procedure to estimate the numbers of colored poker chips from a large population. They then use a school forest map and a sampling procedure to locate research plot centers in their school forest. In small groups, students work in the field to establish the plots in their school forest. Students will use the plots for a variety of research activities.
- A3. **Reading the Forest Landscape** – In this lesson, students learn how to interpret the disturbance history of a forest by using evidence and applying the ecological principles of change and interconnectivity. Student use a narrative that explores human physiology to visualize how the physical world is interconnected and constantly changing. They discuss how forests change and explore disturbances common in Wisconsin forest ecosystems. They work in small groups to use evidence present in the forest landscape to interpret the disturbance history of their school forest. In conclusion, groups present their findings and work as a class to form a consensus view of their school forest disturbance history.
- A4. **Timber Cruise** – Students conduct a timber cruise of their school forest to identify the species of trees, volumes of timber, and basal area on the property. Students work in small groups to collect data and use Kruzer software to analyze the complete class data set.
- A5. **Habitat Typing** – Students work in small groups and use wildlife habitat requirements to assess potential animal habitat based on map interpretation, plant and forest inventory information, on-site forest composition and structure, and wildlife habitat needs.
- A6. **Community Asset Mapping** – In this lesson, students describe their community's assets, stakeholders, and critical issues. Students use an economic flow diagram to understand the relationships between people and valuable resources. They work as a group to identify assets and stakeholders in their local community. Students organize a community forum in which they interview local leaders to identify important issues and the actions being taken. They work individually to map community assets in the context of a specific issue. In conclusion, students reflect on their experience and identify opportunities to learn more and become involved.