Large-Scale Habitat Assessment

Robert J. Fletcher, PhD
University of Florida/IFAS

Martin B. Main, PhD
University of Florida/IFAS
Program Leader, Florida Master Naturalist Program

Overview:
This is one of a series of three 1-day workshops on habitat evaluation and specifically addresses assessing habitat quality at large scales.

Goal for Workshop:
To increase understanding of why habitat evaluation is conducted and the methods used to assess habitat quality at large scales.

Major Learning Objectives:
1. Student will be able to describe the concept of wildlife habitat assessment.
2. Student will be able to describe large-scale assessments, and reasons why large-scale assessments may be useful.
3. Student will demonstrate understanding of the concept of scale, in terms of its components and relevance to habitat assessments.
4. Student will be able to identify different levels for quantifying habitats, and at each level, metrics that can be used for assessing habitat amounts and configurations.
5. Student will be able to relate ways in which large-scale issues can influence wildlife populations.
6. Student will be able to contrast some benefits and limitations of large-scale habitat assessments.
7. Student will have a general foundation for how to initiate large-scale habitat assessments, including an appreciation of data sources and assessment techniques.
Local-Scale Habitat Assessment

George Tanner, PhD
University of Florida/IFAS

Martin B. Main, PhD
University of Florida/IFAS
Program Leader, Florida Master Naturalist Program

Overview:
This is one of a series of three 1-day workshops on habitat evaluation and specifically addresses assessing habitat quality at the local scale.

Goal for Workshop:
To increase understanding of why habitat evaluation is conducted and the methods used to assess habitat quality at the local scale.

Major Learning Objectives:
1. Student will understand why habitat assessments are done at local scales.
2. Student will be able to describe how habitat assessment is influenced by wildlife-habitat relationships and the different habitat components all wildlife need to survive.
3. Student will understand concepts associated with sampling design and bias.
4. Student will be able to identify different types of measures used for quantifying habitat components at local scales.
5. Student will be familiar with different sampling tools, such as quadrats and transects, and how they are used.
6. Student will be familiar with how measures such as percent cover and density differ.
7. Student will become familiar with methods used to measure cover, density, and biomass.
8. Student will have a general foundation for how to initiate large-scale habitat assessments, including an appreciation of data sources and assessment techniques.
Evaluating Water Quality

Mark V. Hoyer, MS
University of Florida/IFAS

Martin B. Main, PhD
University of Florida/IFAS
Program Leader, Florida Master Naturalist Program

Overview:
This is one of a series of three 1-day workshops on habitat evaluation and specifically addresses evaluating water quality.

Goal for Workshop:
To increase understanding of why habitat evaluation is conducted and the methods used to evaluate water quality.

Major Learning Objectives:
1) This presentation describes the major factors that determine the water chemistry values found in aquatic systems around the world.
2) The presentation goes on to describe how the following seven water chemistry parameters function in aquatic systems and how they are related to the ecology of the system:
   - Lake Trophic Status
   - pH
   - Total Alkalinity
   - Specific Conductance
   - Water Color
   - Chloride
   - Dissolved Oxygen

These seven water chemistry parameters were selected because a tremendous amount of insight into how an aquatic system is functioning can be learned from these seven parameters.
3) After describing the parameters and their functioning in the aquatic environment the presentation continues by describing how these parameters can be measured.
4) Finally the presentation gives some examples of lake management activities that happened monitoring the water chemistry of lakes systems.