Habitat Assessment

Stream Habitat

Available Habitat is a Key Limiting Factor for Species Diversity

Assessing stream habitat is an important step in biomonitoring and restoration projects. Almost every project has a habitat evaluation component because it can be a critical limiting factor for species diversity, therefore cost and effort can be minimized by first assessing habitat.

EnviroScience has a decade of experience evaluating in-stream and riparian habitat. EnviroScience can evaluate stream habitat from small headwater streams to major river systems like the Allegheny and Ohio rivers. Oftentimes, habitat can vary greatly, even within a few feet. Therefore, EnviroScience incorporates the latest technology, such as underwater video and GIS / GPS mapping, in conjunction with standard evaluation forms such as the Qualitative Habitat Evaluation Index (QHEI) to provide a visual and descriptive analysis of project area habitat.

Our biologists can assess stream habitat by several innovative methods including:

- GIS / GPS mapping
- Rosgen Stream Classification
- Aquatic and shoreline vegetative surveys
- SCUBA surveys
- Bottom contour mapping
- Bottom typing using hydroacoustics
- Underwater video
- Habitat assessment forms (per state / federal regulatory agency)
Habitat is a broad term used to describe the environment where organisms live and breed. Habitat in reference to aquatic ecosystems generally refers to overhanging vegetation, aquatic plants, woody debris, rock, substrate and water depth. The quality and distribution of these structures directly influence the living organisms and the entire lake ecosystem.

Conducting a habitat inventory with a fishery analysis can effectively guide management decisions concerning recreational fishing, boating, fish stocking and water quality.

Our biologists can assess lake and aquatic ecosystems habitat by several innovative methods including;

- GPS/GIS mapping
- Aquatic and shoreline vegetative surveys
- SCUBA surveys
- Bottom contour mapping
- Bottom typing using hydroacoustics
- Underwater video

A common recommendation given to many lake managers is the enhancement of structures by both artificial and natural means. EnviroScience can aid in the assessment and application of habitat restoration and enhancement programs.

Habitat can be artificially enhanced by man-made structures which are cost effective and easy to construct. EnviroScience can assist in design and installation of these structures as well as facilitate any associated permitting requirements. Examples of these structures include vertical and horizontal
log structures and brush piles.

A common natural restoration activity requires land owners to cease mowing activities near shorelines and allow the growth of a natural buffer. Reseeding shorelines with natural vegetation is one simple way to decrease shoreline erosion and provide shade and cover for juvenile fish. EnviroScience can design an aesthetic natural buffer zone using native plants in a process called Lakescaping.

**Need help with your project?**

Our experts are here to discuss your needs and how we can help you move your project forward. Fill out the form below for more information on our services or to request a quote and we’ll get back to you within 24 hours. If you need a response within an hour or less, please call us at 800-940-4025.

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