THE NORTH LAB

Amphibians as canaries

CLIENT
Yale University

TYPE
Renovation

SIZE
4,487 sq ft

COMPLETION
2014

The work at GML's North Lab centers on research that examines pond-breeding amphibians (tadpoles, frogs and salamanders) as well as arthropod species (spiders and insects) and their ecologies. These organisms are very sensitive to their ecological surroundings and serve as accurate bio-indicators of their environmental conditions.

Through their research, scientists at Yale's School of Forestry and Environmental Studies aim to pinpoint the challenges facing these habitats. According to lead researcher and Director of the Yale Institute for Biospheric Studies Oswald Schmitz "The new lab space accommodates the work very well. We are able to measure metabolic rates of organisms in large numbers using an automated sampling system. This analysis offers critical mechanistic understanding underlying our discovery in the field that organisms change their resource selection to accommodate nutritional needs resulting from environmental stressors like climate change and predation."

Such discoveries may help conserve existing populations and their environments as well as develop more effective predictions of how those populations may adapt over time as ever-changing conditions continue to affect them.

North Lab - web page link

CWA

BACK STORY

Headed by Professor of Ecology and Associate Dean for Research David K. Skelly, who is also the Director of the Yale Peabody Museum, the North Lab supports his team of field biologists. David has been involved with Yale's School of Forestry since 1996.

CONTEXT

Located in the Paul Rudolph designed Greeley Memorial Laboratory, this project updated 30% of the building's main level and provided offices, conference rooms and wet/dry labs - It has restored Rudolph's open plan concept, once again revealing and highlighting the sculptural concrete roof and Y-shaped columns supporting it.

NUTS & BOLTS

Windows and glazing have been replaced throughout and the original steel mullions have been fully restored. The screws fastening the window stops were custom made by a local metal fabricator to match the original screws.

WHAT YOU DON'T SEE

A utility tunnel that extends below the entire lab and minimizes overhead and roof-top MEP systems.

BEST USE

Processing field samples, performing dissections and conducting metabolic analysis in the naturally illuminated bench and related prep spaces.