

NYSF National Center for Youth Science Education

The National Center for Youth Science Education will be an energy-saving residential community capable of housing up to 150 students and an adequate number of staff members and visiting scientists. It will be constructed on a 111-acre tract located adjacent to the Blackwater River near Davis, Tucker County, West Virginia. The Center will become a focal point for informal science education. The Center will be owned and operated by the National Youth Science Foundation®, a nonprofit 501(c)(3) corporation.

Current Programs

• National Youth Science Camp

NYSF is an innovative and highly successful summer science honors program for two high-achieving high school students from each state in the nation and others from around the world. This residential experience is held in a rustic setting in West Virginia's eastern mountains and has honored and challenged more than 4,600 participants since it started in 1963.

• West Virginia Governor's School for Mathematics and Science

GSMS is an innovative summer enrichment program for sixty rising high school freshmen from across West Virginia. This residential experience at the National Radio Astronomy Observatory in Green Bank, WV, introduces students to scientific research through inquiry-based radio astronomy projects.

• Youth Science Discovery Experience*

YSDE teams students and teachers with practicing scientists to pursue semester-long projects in fields of science, technology, engineering, and mathematics. Research teams use distance-learning technologies to continue their work between residential visits to Tucker County, West Virginia.

*YSDE is a pilot program for the 2010-11 academic year.

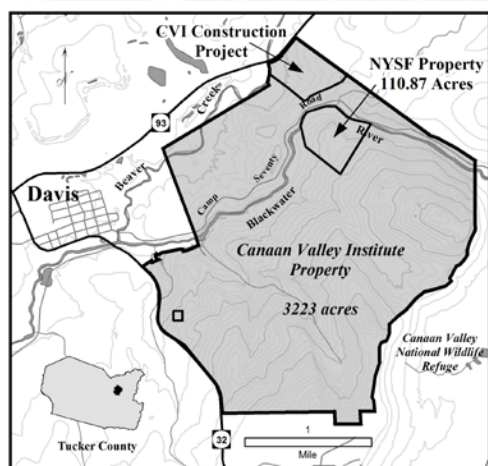
Center Overview

Plan: The Foundation has developed a plan to construct a facility to house science education programs for teachers and students. The National Center for Youth Science Education will become a focal point for informal science education, one that will encourage and inspire youth to pursue scientific careers. The Center will serve up to 1,500 students each year. The Foundation is seeking commitments for funding to construct the Center.

Location: The Center will be constructed on a site selected for its natural attributes that promote program objectives. Above a bluff rising along the south side of the Blackwater River near the center of the delineated tract is a large area of gently sloping and relatively protected but open acreage that is suitable for the majority of constructed features that will comprise the Center. The acreage surrounding the central core of this tract features a host of landscape units much as those that have always been important assets that support the natural history and environmental component of the educational activities of NYSF science education programs.

Atmosphere: The quality of the diverse natural environment will be preserved for environmental observational research. This site should benefit from the drying effect of the early morning sunshine that will reach the site. Woodlands along the top of the bluff should provide a measure of isolation and insulation from nearby roadways and other developments.

Local Resources: The Center will be located near the headquarters of the Canaan Valley Institute; a relatively short walking trail of moderate slope will link the two facilities. This quality of this trail will be enriched by the presence of a number of interesting large rock features, a dispersed stand of tree-sized Rhododendron and good tree cover. Other local resources include the Canaan Valley National Wildlife Refuge, Blackwater Falls State Park, Canaan Valley State Park, Timberline Resort, and White Grass Ski area, and the new Heart of the Highlands trail system.





Center Facilities

- **The Dining Hall** is capable of seating 250 persons around circular tables that accommodate 10 people each; meals are served family style. Elements include a large stone fireplace; a porch with stone floor; lobby area with shelving for books, clothes, and air lock; restrooms; kitchen with office and lounge for staff; and food storage areas including refrigerators and freezers.
- **The Main Assembly Hall** serves as the location for lectures, scientific demonstrations, and artistic performances. It is capable of seating 250 persons. The hall has good acoustics, is equipped with a scientific demonstration area, modern multimedia hardware and software, and is designed to allow artistic performances.
- **Laboratories and Classrooms** for natural science, physical science, and computer science host small-group educational activities. Each lab and classroom contains typical laboratory equipment, instructional technology, and is capable of accommodating 25 students and two instructors. Office space is available for teachers and staff.
- **The Back County Center** is a staging, storage, and maintenance area supporting the outdoor recreation program. It serves as a repository for backpacks, mountain bikes, sleeping bags, tents, caving gear, climbing gear, skiing gear, and other outdoor adventure activities. An office is available.
- **The Applied Arts Center** supports a variety of creative arts pursuits, including drawing, painting, crafts, ceramics, print making, silk-screening, mountain crafts, and digital media creation and manipulation. Office space is available.
- **The Student Life Center** supports sports and recreational activities including table tennis, aerobic and weight fitness, board games, and social activities. It houses the Center's Health and Wellness Clinic and Internet Café.
- **Student Housing** consists of 30-person bunkhouses designed to help develop strong community living.
- **Guest and Staff Housing** provide comfortable living spaces with private bathrooms, work areas, and telecommunications.

Program

Spaces are large enough to encourage group interaction and sufficiently intimate to relate to the individual in a humanistic manner. Technology, nature, and art are interwoven into a working whole to provide a rich environment within an inspiring family-living style in which all participants are both teachers and learners.

Architecture

The architecture style is rustic as represented by the best of western early National Park structures. The model is one where most structures are conceived as heavy timber (post and beam) construction, using hammer beam trusses in major spaces and simple trusses elsewhere. Roofs are metal with long life or natural finish. Nearly all structures have porches with furniture to encourage spontaneous gatherings. Fireplaces are a part of social spaces, interior finishes are predominantly wood or stone, and windows are intended to be screened and open during summer months. Furniture is strong and well designed of a wood pole type construction where appropriate. Equipment is of durable, low maintenance quality.

Construction

Construction techniques are of contemporary efficiency, while allowing for some special craftsmanship to be applied in important areas throughout the Center. Materials are high quality and reduced maintenance.

Demonstration

An allowance is provided for research, design, and implementation of demonstration systems in alternative energy sources (i.e. wind, solar, hydro, and geothermal), waste minimization, and waste management techniques. The intent is to demonstrate the value of applied science and innovative technologies to an environmentally responsible lifestyle.

For more information about the Center or the National Youth Science Foundation, please visit our web site at www.nysf.com, call us at (304) 342-3326, send an E-mail message to nysf@nysf.com, or write us at the National Youth Science Foundation, Post Office Box 3387, Charleston, WV 25333-3387.