

**ASPI**  
Appalachia-Science  
in the Public Interest  
50 Lair St., Mt. Vernon, KY 40456

ASPI TECHNICAL SERIES # 60

## NATURE CENTER EDUCATIONAL PROGRAM

**Nature Center Mission:** To celebrate and furnish information about all the flora and fauna of the precious but fragile Central Appalachian ecosystem.

**Rationale:** ASPI's Mary E. Fritsch Nature Center is located on the beautiful banks of the Rockcastle River. This Nature Center has been established to nurture the spirit of the Appalachian people by showing that our region's environment is a priceless treasure that should not be damaged or destroyed, but rather treasured and enhanced. Our Center seeks to be a living refutation of the message often heard by residents that Appalachia has little of value, so "Let's get all we can from the extraction of coal, timber and other raw materials." Instead of this philosophy we hold that Appalachia has immense natural resources as seen in the variety and abundance of plants and animals. Our goal is to have a display of the many examples of this variety from this region. In the future we will expand the Nature Center to include the cultural and geological heritage.

**Target Audience.** The target is all the people who come and visit us at ASPI, but our special emphasis has been with the young of Central Appalachia. In the past we have focused on the environmental education of those in the middle years of grade school in a number of programs. However, we welcome all, provided respect is shown for our treasures.

**Location.** Our Nature Center is located on a 180 acre tract of wooded land in the Rockcastle River Valley in south central Kentucky about fifty miles north of the Tennessee border. The center is very accessible, for we are two miles from an exit to the busiest highway in the Region (I-75), and a day's journey by car from almost half the American people. So we are not removed from the beaten path -- and yet are surrounded by a beauty that could be imagined many miles from civilization.

**The building** is a two-story native wood structure of 1,500 square feet containing a large second floor gathering hall (ADA accessible by inclined ramp) and first floor kitchenette, greenspace, storeroom and video-viewing /guest room. A major contribution in the construction was from Mary E. Fritsch of Maysville, Kentucky, for whom the nature center is named.



*The Mary E. Fritsch Nature Center*

**The Contents.** The main Nature Center portion contains basic information on the flora and fauna of central Appalachia. Included is the stuffed bird collection (obtained from road-kill) of Dr. Gene Wilhelm of Slippery Rock, Pennsylvania. Also there are numerous nature pictures and posters. Also the building is equipped with an ASPI-designed dry compost toilet, solar photovoltaic panels donated by the Siemens Corporation,

and uses water from a nearby spring-fed cistern.

**The Setting.** From the north-facing large porch-deck one can view about two dozen of the many varieties of native trees in this alcove and nearby valley. We seek to preserve the woods but also we gather fuel from the nearby forest as an auxiliary source of heat, for we believe in preserving the natural beauty, but poor folks have to harvest some wood for their needs. The goal is to act sustainably. These woods are private land and yet surrounded by the Daniel Boone National Forest.



*On the Michael Zalla Trail*

**The Trails.** The system of about eight miles of trails involves three separate sections: the *Irene Dickenson Trail*, *Michael Zalla Trail* and the *Cerulean Blue Warbler Trail*. Each of these has its own distinction: the first is a longer trail of about three miles through the upper slopes of the valley and named after a famous environmentalist who died in 1997; the second is named for a youth who was killed about a decade ago in an automobile accident and was a good environmental poet even at an early age; the last is a trail being built on leased U.S. Forest Service land and includes some old growth forest and the habitat of an endangered warbler.

## The Flora

We invite you to sit awhile on a sandstone boulder and absorb the sounds, sights, feeling, tastes, and smells of the woods. Realize that these woods have survived logging but have been damaged in the Great Tornado of 1974, which bent many of the trees in one direction. That was a natural disaster, but we allow nature to heal its own wounds.

**The Woods.** When visiting you are within -- what the noted biologist Lucy Braun designated as -- the *Mixed Mesophytic Forest*, the oldest and most varied temperate forest on Earth. In fact you are near the geographic center of this forest that stretches from southwest Pennsylvania to northern Alabama. Walk gently in this wonderland. On these grounds you are able to discover almost a hundred species of native trees from white oaks and hickories to sycamore and tulip popular. (See Appendix 1 for tree listing). You will not find such variation anywhere else in America, so treat the woods kindly. On the grounds near the river are found some added fruit trees (apple, pear, cherry) and two American Chestnuts which are attempting a comeback in their former native range.

**The Understory.** Only observe. Do not dig up or pull out flowers. Do not cut live or dead wood. We have a wide variety of wildflowers, especially in the spring (see Appendix 2). They are beauty to behold -- not hold. You may pick a "taste" of blackberries, may apples, strawberries, raspberries, dewberries, elderberries, huckleberries, persimmons, mulberries, or papaws when in season. Leave nuts and acorns for wildlife. Don't pick greens or mushrooms without explicit permission except on public road rights-of-way.

## The Fauna

**Mammals.** Kentucky once teemed with wildlife which afforded it the honor of being a reserved hunting ground for neighboring Native American nations and tribes. In driving the roads to get to the Nature Center one sees live game and enough road kill (rabbit, squirrel, opossum, tarpon, pole cat, etc.) to know that wildlife still abounds. We have observed wildcats in the 1970s before dogs were kept on or near the property. We have

Appendix 1  
**WOODY FOREST PLANTS OF ASPI**  
 Compiled by Prof. Paul Kalisz

<u>BOTANICAL NAME</u>	<u>FAMILY</u>	<u>COMMON NAME</u>
<i>Liriodendron tulipifera</i>	Magnoliaceae	yellow-poplar
<i>Magnolia acuminata</i>	Magnoliaceae	cucumbertree
<i>Magnolia macrophylla</i>	Magnoliaceae	bigleaf magnolia
<i>Magnolia tripetala</i>	Magnoliaceae	umbrella magnolia
<i>Asimina triloba</i>	Annonaceae	pawpaw
<i>Lindera benzoin</i>	Lauraceae	spicebush
<i>Sassafras albidum</i>	Lauraceae	sassafras
<i>Hydrangea arborescens</i>	Saxifragaceae	wild hydrangea
<i>Hamamelis virginiana</i>	Hamamelidaceae	witch-hazel
<i>Platanus occidentalis</i>	Platanaceae	American sycamore
<i>Celtis occidentalis</i>	Ulmaceae	hackberry
<i>Ulmus alata</i>	Ulmaceae	winged elm
<i>Ulmus americana</i>	Ulmaceae	American elm
<i>Ulmus rubra</i>	Ulmaceae	slippery elm
<i>Morus rubra</i>	Moraceae	red mulberry
<i>Castanea dentata</i>	Fagaceae	American chestnut
<i>Fagus grandifolia</i>	Fagaceae	American beech
<i>Quercus alba</i>	Fagaceae	white oak
<i>Quercus coccinea</i>	Fagaceae	scarlet oak
<i>Quercus falcata</i>	Fagaceae	southern red oak
<i>Quercus muehlenbergii</i>	Fagaceae	chinkapin oak
<i>Quercus prinus</i>	Fagaceae	chestnut oak
<i>Quercus rubra</i>	Fagaceae	northern red oak
<i>Quercus stellata</i>	Fagaceae	post oak
<i>Quercus velutina</i>	Fagaceae	black oak
<i>Betula lenta</i>	Betulaceae	sweet birch
<i>Betula nigra</i>	Betulaceae	river birch
<i>Alnus serrulata</i>	Betulaceae	alder
<i>Carpinus caroliniana</i>	Betulaceae	musclewood
<i>Corylus american</i>	Betulaceae	hazelnut
<i>Ostrya virginiana</i>	Betulaceae	ironwood
<i>Carya cordiformis</i>	Juglandaceae	bitternut hickory
<i>Carya glabra</i>	Juglandaceae	pignut hickory
<i>Carya ovata</i>	Juglandaceae	shagbark hickory
<i>Carya tomentosa</i>	Juglandaceae	mockernut hickory
<i>Juglans cinerea</i>	Juglandaceae	butternut
<i>Juglans nigra</i>	Juglandaceae	black walnut
<i>Populus grandidentata</i>	Salicaceae	bigtooth aspen
<i>Epigaea repens</i>	Ericaceae	trailing arbutus
<i>Gaylussacia baccata</i>	Ericaceae	huckleberry
<i>Kalmia latifolia</i>	Ericaceae	mountain-laurel
<i>Oxydendrum arboreum</i>	Ericaceae	sourwood
<i>Rhododendron maximum</i>	Ericaceae	rhododendron
<i>Vaccinium sdb. (&gt;2 sdb.)</i>	Ericaceae	blueberry

<u>BOTANICAL NAME</u>	<u>FAMILY</u>	<u>COMMON NAME</u>
<i>Diospyros virginiana</i>	Ebenaceae	common persimmon
<i>Tilia heterophylla</i>	Tiliaceae	white basswood
<i>Amelanchier arborea</i>	Rosaceae	serviceberry
<i>Prunus serotina</i>	Rosaceae	black cherry
<i>Rubus spp. (&gt;2 spp.)</i>	Rosaceae	blackberry
<i>Cercis canadensis</i>	Leguminosae	eastern redbud
<i>Robinia pseudoacacia</i>	Leguminosae	black locust
<i>Rhus glabra</i>	Anacardiaceae	smooth sumac
<i>Toxicodendron radicans</i>	Anacardiaceae	poison-ivy
<i>Acer negundo</i>	Aceraceae	boxelder
<i>Acer rubrum</i>	Aceraceae	red maple
<i>Acer saccharinum</i>	Aceraceae	silver maple
<i>Acer saccharum</i>	Aceraceae	sugar maple
<i>Aesculus octandra</i>	Hippocastanaceae	yellow buckeye
<i>Aralia spinosa</i>	Araliaceae	devil's walking stick
<i>Cornus ammomum</i>	Cornaceae	silky dogwood
<i>Cornus florida</i>	Cornaceae	flowering dogwood
<i>Nyssa sylvatica</i>	Nyssaceae	blackgum
<i>Ilex opaca</i>	Aquifoliaceae	American holly
<i>Fraxinus americana</i>	Oleaceae	white ash
<i>Fraxinus pennsylvanica</i>	Oleaceae	green ash
<i>Bignonia capreolata</i>	Bignoniaceae	cross-vine
<i>Parthenocissus quinquefolia</i>	Vitaceae	Virginia creeper
<i>Vitisspp. (&gt;2 spp.)</i>	Vitaceae	grapes
<i>Sambucus canadensis</i>	Caprifoliaceae	American elder
<i>Viburnum acerifolium</i>	Caprifoliaceae	maple-leaf viburnum
<i>Viburnum prunifolium</i>	Caprifoliaceae	black-haw
<i>Staphlea trifolia</i>	Staphyleaceae	bladdernut
<i>Arundinaria gigantea</i>	Gramineae	cane, bamboo
<i>Smilax spp. (&gt;3 spp.)</i>	Liliaceae	greenbriar
<i>Pinus echinata</i>	Pinaceae	shortleaf pine
<i>Pinus rigida</i>	Pinaceae	pitch pine
<i>Pinus virginiana</i>	Pinaceae	Virginia pine
<i>Tsuga canadensis</i>	Pinaceae	eastern hemlock
<i>Juniperus virginiana</i>	Cupressaceae	red cedar

Appendix 2  
**WILDFLOWERS OF ASPI**  
 Compiled by Janet Powell

key: EVR=evergreen SPR=spring SUM=summer FAL=fall

COMMON	SCIENTIFIC	SEASON
<u>Mosses and ferns:</u>		
EBONY SPLEENWORT	<i>Asplenium platyneuron</i>	EVR
CHRISTMAS FERN	<i>Polystichum acrostichoides</i>	EVR
MAIDENHAIR FERN	<i>Adiantum pedatum</i>	SPR,SUM
NEW YORK FERN	<i>Thelypteris noveboracensis</i>	SPR, SUM
BRACKEN	<i>Pteridium latiusculum</i>	SPR,SUM
ROCK CLUBMOSS	<i>Lycopodium porophilum</i>	EVR
SHINING CLUBMOSS	<i>Lycopodium lucidulum</i>	EVR
<u>Wildflowers:</u>		
LG. FLOWER BELLWORT	<i>Uvularia grandiflora</i>	SPR
BELLWORT	<i>Uvularia perfoliata</i>	SPR
FALSE SOLOMON'S SEAL	<i>Smilacina racemosa</i>	SPR
WILD GARLIC	<i>Allium canadense</i>	SPR
SOLOMON'S SEAL	<i>Polygonatum biflorum</i>	SPR
CRESTED DWARF IRIS	<i>Iris cristata</i>	SPR
RATTLESNAKE PLANTAIN	<i>Goodyera pubescens</i>	FAL
JACK-IN-THE-PULPIT	<i>Arisaema atrorubens</i>	SPR
SESSILE TRILLIUM	<i>Trillium sessile</i>	SPR
UMBRELLA SEDGE	<i>Cyperus strigosus</i>	FAL
DROOPING SEDGE	<i>Carex crinita</i>	SUM
HOP SEDGE	<i>Carex lupulina</i>	SUM
KY BLUEGRASS	<i>Poa pratensis</i>	SPR
LG. WOOD SORREL	<i>Oxalis grandis</i>	SPR
EARLY BUTTERCUP	<i>Ranunculus fascicularis</i>	SPR
MOCK STRAWBERRY	<i>Duchesnea indica</i>	SPR
DWARF CINQUEFOIL	<i>Potentilla canadensis</i>	SPR
COMMON CINQUEFOIL	<i>Potentilla simplex</i>	SPR
STAR CHICKWEED	<i>Stellaria pubera</i>	SPR
COMMON CHICKWEED	<i>Stellaria media</i>	SPR
RUE ANEMONE	<i>Anemonella thalictroides</i>	SPR
MAY-APPLE	<i>Podophyllum peltatum</i>	SPR
BLOODROOT	<i>Sanguinaria canadensis</i>	SPR
CUT-LEAF TOOTHWORT	<i>Dentaria laciniata</i>	SPR
SLENDER TOOTHWORT	<i>Dentaria heterophylla</i>	SPR
PIPSISSIWA	<i>Chimaphila maculata</i>	SUM
COLUMBINE	<i>Aquilegia canadensis</i>	SPR
FIRE PINK	<i>Silene virginica</i>	SUM
WILD GERANIUM	<i>Geranium maculatum</i>	SPR
VIOLET WOOD SORREL	<i>Oxalis violacea</i>	SPR
BLUE PHLOX	<i>Phlox divaricata</i>	SPR
JACOB'S LADDER	<i>Polemonium reptans</i>	SPR
VIRGINIA BLUEBELLS	<i>Mertensia appendiculatum</i>	SPR
BLUETS	<i>Houstonia caerulea</i>	SPR

SPRING-BEAUTY	<i>Claytonia virginica</i>	SPR
TRAILING ARBUTUS	<i>Epigaea repens</i>	SPR
FOUR-LEAVED MILKWEED	<i>Asclepias quadrifolia</i>	SPR
ALLEGHENY SPURGE	<i>Pachysandra procumbens</i>	SPR
WILD CARROT	<i>Daucus carota</i>	SUM
ALUM-ROOT	<i>Heuchera villosa</i>	SUM
PANICLED BELLFLOWER	<i>Campanula divaricata</i>	SUM
STONECROP	<i>Sedum ternatum</i>	SPR
RED CLOVER	<i>Trifolium pratense</i>	SUM
CROWN VETCH	<i>Coronilla varia</i>	SUM
BEDSTRAW	<i>Galium aparine</i>	SUM
WOOD-BETONY	<i>Pedicularis canadensis</i>	SPR
HAIRY BEARD-TONGUE	<i>Penstemon hirsutus</i>	SPR
SHORT-SEPAL		
BEARD-TONGUE	<i>Penstemon brevisepalus</i>	SPR
LYRE-LEAVED SAGE	<i>Salvia lyrata</i>	SPR
HEAL-ALL	<i>Prunella vulgaris</i>	SUM
DITTANY	<i>Cunila origanoides</i>	SUM
HENBIT	<i>Lamium amplexicaule</i>	SPR
HOARY MOUNTAIN-MINT	<i>Pycnanthemum pycnanthemoides</i>	SUM
JEWELWEED	<i>Impatiens pallida</i>	SUM
SWEET WHITE VIOLET	<i>Viola blanda</i>	SPR
WHITE VIOLET	<i>Viola striata</i>	SPR
LONG-SPURRED VIOLET	<i>Viola rostrata</i>	SPR
COMMON BLUE VIOLET	<i>Viola papilionacea</i>	SPR
DWARF LARKSPUR	<i>Delphinium tricornis</i>	SPR
BIRD'S-EYE	<i>Veronica persica</i>	SPR
MISTFLOWER	<i>Eupatorium coelestinum</i>	SUM
DANDELION	<i>Taraxacum officinale</i>	SPR
DWARF-DANDELION	<i>Krigia biflora</i>	SPR
HAWKWEED	<i>Hieracium venosum</i>	SPR
GOLDENROD(S)	<i>Solidago ---</i>	SUM
EARLY	<i>juncea</i>	
WREATH	<i>caesia</i>	
BROAD-LEAF	<i>flexicaulis</i>	
GRASS-LEAVED	<i>graminifolia</i>	
LARGE COREOPSIS	<i>Coreopsis major</i>	SUM
COREOPSIS	<i>Coreopsis auriculata</i>	SPR
BLACK-EYED SUSAN	<i>Rudbeckia hirta</i>	SUM
OX-EYE DAISY	<i>Chrysanthemum leucanthemum</i>	SUM
ROBIN'S PLANTAIN	<i>Erigeron pulchellus</i>	SPR
SHORT'S ASTER	<i>Aster shortii</i>	FAL
GOAT'S BEARD	<i>Aruncus dioicus</i>	SUM
HEART-LEAVED ASTER	<i>Aster cordifolius</i>	FAL
WAVY-LEAF ASTER	<i>Aster undulatus</i>	FAL
PANICLED ASTER	<i>Aster simplex</i>	FAL
CALICO ASTER	<i>Aster lateriflorus</i>	FAL
LITTLE BROWN JUG	<i>Asarum arifolium</i>	SPR
INDIAN PIPE	<i>Monotropa uniflora</i>	SUM
WHITE CLOVER	<i>Trifolium hybridum</i>	SUM
HONEYSUCKLE	<i>Lonicera japonica</i>	SUM

plenty of duck, geese and wild turkey to hear and see. Also deer abound as well as many other types of mammals.

**Birds.** In 1980 a professional birder, Steve Mitten, counted over 200 species at ASPI during the spring migration period. Some birds winter here such as the cardinals, chickadees, and crows. Others such as the whippoorwill come only in the warmer months. At night one can hear the haunting call of the hoot owl and be entertained by the mockingbird in early morning and evening. We have restricted the presence of pet cats in order to attract birds.

**Snakes.** Yes, we have snake varieties found in central Appalachia and have never known a snake to attack anyone. Don't step on them, for this may make them unhappy. Most of the sightings are for small green snakes and maybe a black snake. We do have copperheads near the water and rattlesnakes in the hills which will come down in dryer weather. However, it is very rare for hikers to see these snakes.

**Fish.** We do not oppose people fishing in the river, but do not encourage it from our property. All water activities can take place at other locations, because the River is quite deep and the banks steep at our Center. Those who fish the River list about a dozen varieties such as bass and bluegill. Some of the mussels found in the river are endangered.

**Insects.** A host of different bugs and creepy-crawlies abound. Some are less of a threat such as moths, butterflies, and praying mantises. Others, such as wasps or yellow jackets should be left to themselves. We attempt to remove hornet nests close to where people normally hike. The small spiders and scorpions can also be left to themselves.

**Soil Life.** The rich Rockcastle River bottomlands and the thinner soils of the forest contain many varieties of microorganisms. It would be impossible to identify all of these varieties, but it is important that we know they are present in countless numbers and are needed for the health and well-being of the entire ecosystem.

## ASPI, The Nature Center Sponsor

Appalachia - Science in the Public Interest (ASPI) is a non-profit, tax-exempt environmental group incorporated in 1977 in the Commonwealth of Kentucky. ASPI seeks to make science and technology responsive to the needs of low-income people of Central Appalachia by a variety of demonstration, outreach and advocacy activities. ASPI operates an appropriate technology (AT) and sustainable forest center near Livingston, Kentucky where this nature center is located. At its main office in Mt. Vernon ASPI publishes environmental and AT reports and literature and has a Web Site on these subjects. It also conducts workshops and tours, gathers oral histories, and has a weekly television show, *Earth Healing* on WOBZ-TV, London, KY.

**Public Support.** ASPI is self-supporting through donations, grants, and sales of materials especially our annual Simple Lifestyle Calendar. There is a modest camping fee but no set fee for visiting the Nature Center.



Donations are deeply appreciated. Donations make it possible for us to carry on a number of programs dealing with forest sustainability, appropriate technology and dissemination of our generated written and videotape materials.

## General Information

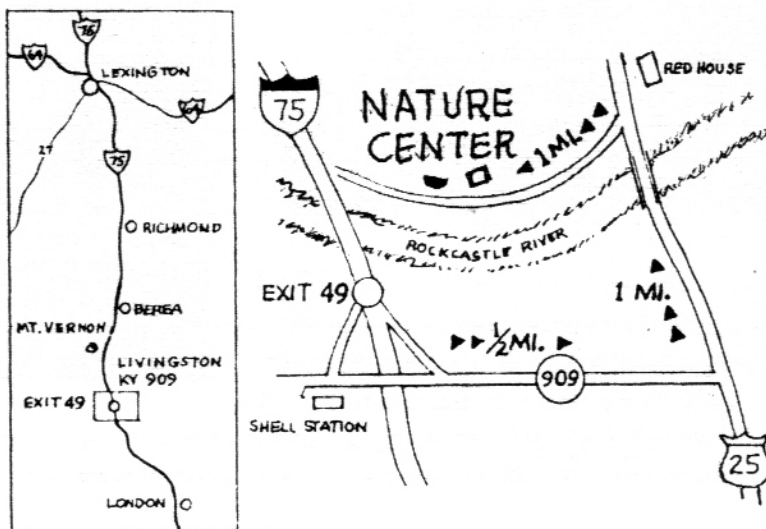
### Directions to Nature Center:

From North: I-75 to exit 49, left 0.7 miles on KY 909 to U.S. 25; left one mile; opposite Rockcastle River Trading Company gift shop, left one mile on KY 1329 to ASPI, second building on the right.

From South: I-75 to exit 49, turn right, then follow the directions from the north.

From East: Route 80 to London; right on U.S. 25; go about 15 miles, cross Rockcastle River bridge, left on KY 1329 to ASPI.

From West: Route 80 to London; left on U.S. 25 and follow east directions.



**Visiting.** The Nature Center is ideal for local families and individuals, school groups, college spring and autumn breakers and other Appalachians and visitors from the outside who desire to learn about the region's rich diversity. A pavilion allows for picnicking on the grounds. Self-guided tours of the trails and grounds are possible by appointment. General tours are also available on River Day, the first Saturday of June, on the annual Solar Tour Day in October and on other special times. Please write or call beforehand for a listing of special events and so that we can expect and welcome you.

**Camping.** If you desire to camp please use designated sites only after obtaining explicit permission to use our leased camp grounds just east of the Solar House and Herb Garden. We do not permit camping at the guest pavilion. This camping is primitive which means no electric hook-ups. A nearby outdoor dry composting toilet is available for camper use. Bring camping supplies, water, and food, and pack out garbage. Ice and basic supplies are sold next door and food and fuel may be obtained two miles away at the Service Stations at Exit-49. Camp fires are only permitted when allowed by the Daniel Boone National Forest regional office for the general boundaries. There is a modest camping fee.

**Further Information.** Please visit our Web Site [www.kih.net/aspi](http://www.kih.net/aspi)