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



The Mary E. Fritsch Nature Center

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 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.

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 it own distinction: the first is a longer trail of about three miles through the upper slopes of the valley and named after a famous environ-



On the Michael Zalla Trail

mentalist 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

#### **BOTANICAL NAME**

#### **FAMILY**

#### **COMMON NAME**

vellow-poplar

Liriodendron tulipifera Magnolia acuminata Magnolia macrophylla Magnolia tripetala Asimina triloba Lindera benzoin Sassafras albidum Hydrangea arborescens Hamamelis virginiana Platanus occidentalis Celtis occidentalis I Ilmus alata Ulmus americana IЛтиs rubra Morus rubra Castanea dentata Fagus grandifolia Ouercus alba Ouercus coccinea Ouercus falcata Quercus muehlenbergii Quercus prinus Ouercus rubra Quercus stellata Ouercus velutina Betula lenta Betula nigra Alnus serrulata Carpinus caroliniana Corylus american Ostrya virginiana Carya cordiformis Carya glabra Carya ovata Carya tomentosa Juglans cinerea Juglans nigra Populus grandidentata Epigaea repens Gaylussacia baccata Kalmia latifolia Oxydendrum arboreum Rhododendron maximum

Vaccinium spp. (>2 spp.)

Magnoliaceae Magnoliaceae Magnoliaceae Magnoliaceae Annonaceae Lauraceae Lauraceae Saxifragaceae Hamamelidaceae Platanaceae Ulmaceae Ulmaceae Ulmaceae Ulmaceae Moraceae Fagaceae Betulaceae Betulaceae Betulaceae Betulaceae Betulaceae Betulaceae **Juglandaceae** Juglandaceae Juglandaceae Juglandaceae Juglandaceae Juglandaceae Salicaceae Ericaceae Ericaceae Ericaceae Ericaceae

Ericaceae

Ericaceae

cucumbertree bigleaf magnolia umbrella magnolia pawpaw spicebush sassafras wild hydrangea witch-hazel American sycamore hackberry winged elm American elm slippery elm red mulberry American chestnut American beech white oak scarlet oak southern red oak chinkapin oak chestnut oak northern red oak post oak black oak sweet birch river birch alder musclewood hazelnut ironwood bitternut hickory pignut hickory shagbark hickory mockernut hickory butternut black walnut bigtooth aspen trailing arbutus huckleberry

mountain-laurel

rhododendron

sourwood

blueberry

#### **BOTANICAL NAME**

Diospyros virginiana
Tilia heterophylla
Amelanchier arborea
Prunus serotina
Rubus spp. (>2 spp.)
Cercis canadensis
Robinia pseudoacacia
Rhus glabra

Toxicodendron radicans
Acer negundo
Acer rubrum
Acer saccharinum
Acer saccharum
Aesculus octandra
Aralia spinosa
Cornus ammomum
Cornus florida
Nyssa sylvatica

Ilex opaca Fraxinus americana Fraxinus pennsylvanica Bignonia capreolata

Parthenocissus quinquefolia

Vitisspp. (>2 spp.)
Sambucus canadensis
Viburnum acerifolium
Viburnum prunifolium

Staphlea trifolia Arundinaria gigantea Smilax spp. (>3 spp.) Pinus echinata

Pinus echinata Pinus rigida Pinus virginiana Tsuga canadensis Juniperus virginiana

#### **FAMILY**

Ebenaceae
Tiliaceae
Rosaceae
Rosaceae
Rosaceae
Leguminosae
Leguminosae
Anacardiaceae
Anacardiaceae
Aceraceae

Aceraceae Aceraceae Hippocastanaceae Araliaceae

Cornaceae Cornaceae Nyssaceae

Aquifoliaceae Oleaceae Oleaceae

Bignoniaceae Vitaceae

Vitaceae

Caprifoliaceae Caprifoliaceae

Caprifoliaceae Staphyleaceae Gramineae Liliaceae Pinaceae Pinaceae Pinaceae

Cupressaceae

## COMMON NAME

common persimmon white basswood serviceberry black cherry blackberry eastern redbud black locust smooth sumac poison-ivy boxelder red maple silver maple sugar maple

yellow buckeye devil's walking stick

silky dogwood flowering dogwood

blackgum American holly white ash green ash cross-vine Virginia creeper

grapes

American elder maple-leaf viburnum

black-haw bladdernut cane, bamboo greenbriar shortleaf pine pitch pine Virginia pine eastern hemlock

red cedar

# Appendix 2 WILDFLOWERS OF ASPI

Compiled by Janet Powell

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

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

TRAILING ARBUTUS FOUR. LEAVED MILKWEED Asclepias quadrifolia ALLEGHENY SPURGE WILD CARROT ALUM-ROOT ALUM-R	SPRING-BEAUTY	Claytonia virginica	SPR
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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

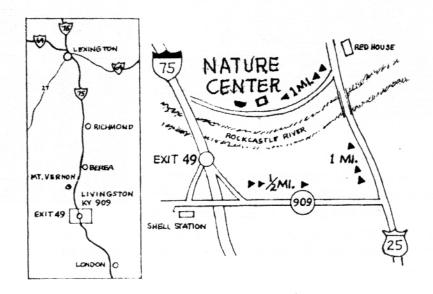
#### **Directions to Nature Center:**

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.

<u>From South:</u> 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.

<u>From West:</u> 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