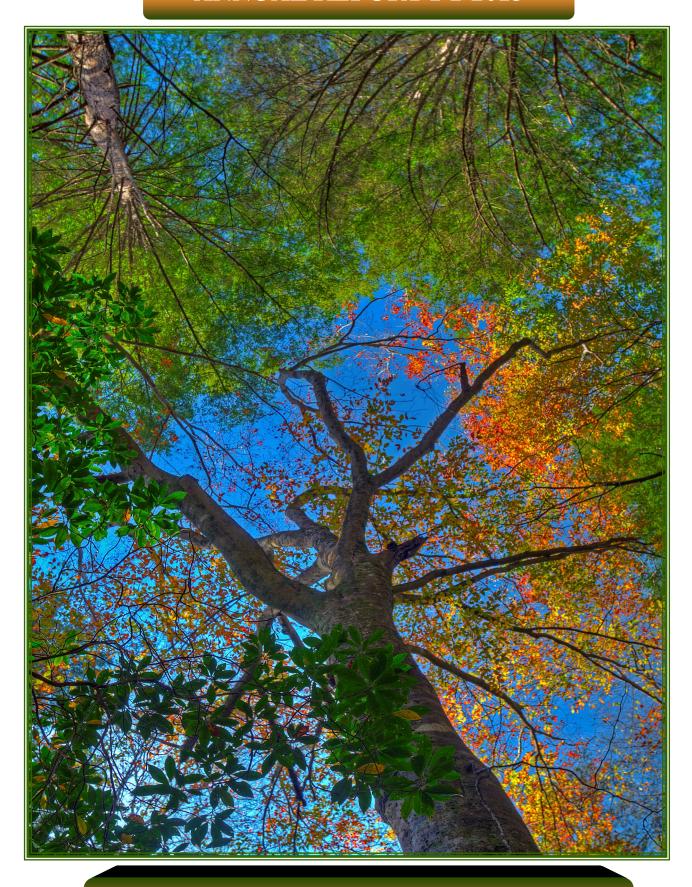
# **ANNUAL REPORT FY 2015**



KENTUCKY HERITAGE LAND CONSERVATION FUND



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Kentucky Heritage Land Conservation Fund web-site: <a href="http://heritageland.ky.gov">http://heritageland.ky.gov</a>

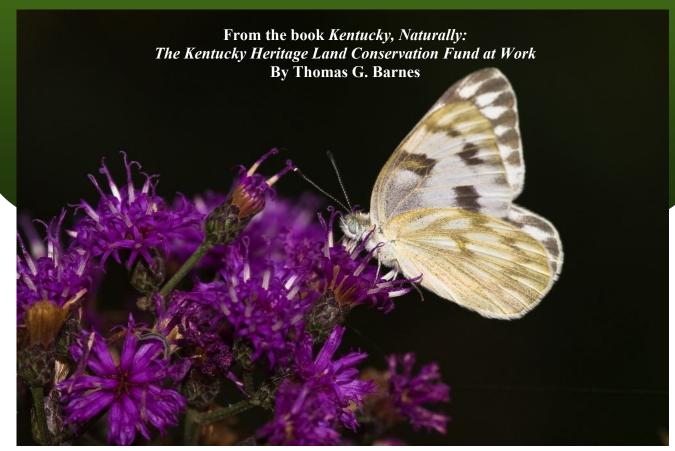
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# KENTUCKY HERITAGE LAND CONSERVATION FUND

Kentucky has an invaluable natural heritage recognized nationally and internationally for its outstanding, productive, biologically and geologically diverse lands and waters. The Kentucky Heritage Land Conservation Fund is committed to protecting these diverse lands and "Keeping Kentucky Green" by awarding grant funds to purchase and preserve the state's natural lands in perpetuity for enjoyment by this and future generations.

Kentucky Heritage Land Conservation Fund dollars have been awarded to protect and conserve some of Kentucky's best known natural areas: old-growth hardwoods at Blanton Forest in eastern Kentucky; savannah woodlands at Griffith Woods as well as parts of the Kentucky River Palisades in central Kentucky; urban forests at the Jefferson Memorial Forest in the state's largest city; bat populations and caves in southern Kentucky; cliff-lined valleys along the banks of the Martin's Fork Wild River in Harlan County; and diverse watershed and wetland areas with endangered mussel species at the Green River State Forest in the western part of the state.



### Letter from Dr. Richard K. Kessler, KHLCF Chairman

The KHLCF continues to recover from budget cuts in the 2014 budget and new project application proposals are being considered once again. A combination of revenue along with refunds from some project withdrawals have contributed to this. In addition, license plate sales have been relatively "steady" in spite of media reports questioning whether citizens should buy them. These continued sales will help us recover from past cuts even more rapidly and indicate a strong base of supports for KHLCF and the nature's finest plates.

Nevertheless the next budget cycle is always around the bend and as we look forward to a better FY 16 we hope the budget cuts of the past will be just that- in the past. With this in mind I would like to share with you an excerpt from an op-ed article I wrote for the Courier-Journal last March:

The nearly 130 sites in 67 counties protected solely or in part by KHLCF over the past 20 years provide our citizens with opportunities for hiking, wildlife viewing, hunting, fishing and paddling. Some protect a number of the most critically endangered plants and animals in the commonwealth. From the developing Pine Mountain Trail (Kentucky's version of the Appalachian Trail), to the rivers, forests and wetlands of our state, all of these sites supported by KHLCF add to the quality of life enjoyed by citizens of the commonwealth.

However, the threats to unprotected resources or sites continue to grow while funding for the state's primary source of conservation dollars continues to decline.

As reported in recent Courier-Journal articles, the most significant decline occurred recently as a result of the Kentucky legislature passing the governor's budget slashing \$8 million from restricted (non-general fund) KHLCF funds over 2 fiscal years with no promise of recouping these funds.

To add insult to injury, Kentucky already trails virtually every other neighboring state in its commitment to conservation funding.

These recent cuts occurred in spite of the fact that a 2013 study funded by The Trust for Public Land and Conserve Kentucky concluded that 82 percent of Kentuckians think conservation funding should either stay the same or be increased. This same study showed that for every \$1 of KHLCF funds invested over \$8 in economic benefit is returned to the commonwealth. That should be welcome news to the 77 percent of voters in the study who believe we can have a clean environment and a strong economy at the same time.

A few years ago I attended the Kentucky Author Forum in Louisville when well-known conservationist Jeff Corwin interviewed the respected natural science author Richard Ellis regarding his latest book. On Thin Ice was a commentary on the status and future security of the polar bear. Near the end of the interview, Corwin asked Ellis how he really felt about chances that the polar bear would escape extinction. Ellis' response was that he had little hope for the polar bear because "not enough people care."

It is obvious that Kentuckians care about conservation. So perhaps the real question is: What are our legislators and governor's office willing to do about it?

Here's hoping we can work to address the serious issue of conservation funding (or lack of) for our state before the next budget session. Will & M

Sincerely.

Richard K. Kessler KHLCF Board Chair

### Mission

The Kentucky Heritage Land Conservation Fund (KHLCF) is the primary source of state funding for the purchase of natural areas and is committed to protecting and conserving our Commonwealth's precious natural areas for enjoyment by this and future generations. Each property funded by the KHLCF is protected in perpetuity by a conservation easement or deed restriction.

The fund was established by the Kentucky Heritage Land Conservation Act in 1990. This legislation established priorities for property acquisitions including:

- natural areas that possess unique features such as habitat for rare and endangered species;
- areas important to migratory birds;
- areas that perform important natural functions subject to alteration or loss;
- areas to be preserved in their natural state for public use, outdoor recreation and education.

The fund is managed by the 12-member Kentucky Heritage Land Conservation Fund Board appointed by the governor. Revenue for the fund comes from the state portion of the unmined minerals tax, environmental fines, sale of Kentucky nature license plates and interest.

By statute the Environmental Education Council receives \$150,000 of environmental fines each year for environmental education programs and the Department for Energy Development and Independence receives \$400,000 of unmined minerals tax for the purpose of public education of coal-related issues. These funds are not part of the KHLCF program, but the KHLCF handles their initial financial transfers administratively. This is reflected in the *Financial Information* section of this report.

Organizationally and administratively, the KHLCF is attached to the Department for Natural Resources.

### KHLCF funds are distributed quarterly as follows by statute:

- 10% Department of Fish and Wildlife Resources
- 10% Department of Parks
- 10% Division of Forestry
- 10% Kentucky State Nature Preserves Commission
- 10% Kentucky Division of Water, Wild Rivers Program
- 50% Local Governments, State Colleges,
  - Universities, Nonprofit Trust Organizations and Other Public Agencies

To receive program funding, eligible agencies must submit an application identifying the priority the project addresses; an enumeration of costs; a budget indicating how at least 10 percent of the acquisition cost will be spent for management; and a preliminary resource management plan for the project. During FY 2015, the board held four regularly scheduled quarterly meetings to consider applications for funding.

If the project is approved, each agency has two years to acquire the property unless an extension to purchase is submitted for approval by the board. Agencies have two and one - half years after the property is purchased to submit a final resource management plan for review and approval.



Wood thrush banded as part of a KHLCF biological inventory.

Photo by Zeb Weese

# **KHLCF** Accomplishments

Since 1995, the Kentucky Heritage Land Conservation Fund Board has played an integral part in helping state agencies, local governments, and state colleges and universities protect and conserve 87,858.73 acres of Kentucky's natural areas and habitats. To date, the fund has provided financial support, in whole or in part, to acquire 130 sites in 67 counties. There have been 76,206.21 acres conserved by state agencies and / or multiple-agency partnerships, 9782.55 acres conserved by local governments and conservation districts, and 1,985.70 acres conserved by universities.

	O	f the Conservation Fund 5 - June 2015	
Applicant	Number of Projects	Acreage Conserved	Funding*
Fish and Wildlife Resources	8	40,701.18	\$ 7,805,255.59
Division of Forestry	5	3,166.56	\$ 4,609,787.85
<b>State Nature Preserves Commission</b>	32	9,943.86	\$ 7,884,358.59
Department of Parks	11	2,583.37	\$ 3,816,762.76
Division of Water, Wild Rivers	8	5,030.15	\$ 6,566,797.02
Multiple Agency Partners	6	14,781.09	\$ 11,673,455.86
<b>County Governments</b>	29	6,815.68	\$ 12,349,824.82
City Governments	8	526.19	\$ 1,603,725.25
Metro Governments	6	956.24	\$ 3,145,735.45
Colleges/Universities	7	1,985.70	\$ 4,714,733.15
<b>Conservation Districts</b>	8	1,484.44	\$ 4,548,216.66
Totals:	130	87,974.46	\$ 64,039,635.64
*Includes both acquisition and manag	gement costs.		

A list of all properties purchased in whole or in part with KHLCF funding appears on pages 13-15. Since 1995, the board has approved 250 projects in 73 counties.



Phlox at Morning View Heritage Land Photo by ZebWeese

# **FY 2015 Purchased Properties**

In FY 2015 a total of 1394.53 acres of Kentucky's natural lands in eight different counties were conserved with funding assistance from the KHLCF.

FY 20	15 KHLCF ACQUISITIONS		
PROJECT	AGENCY	COUNTY	ACRES
Burnett WWCA - Garrison Tract	DOW	McCreary	136.55
Blanton Forest SNP - Gaines Tract	KSNPC	Harlan	386
Ballard WMA - Harper Tract	KDFWR	Ballard	256
Big Bone Lick State Park - Piner Tract	PARKS	Boone	236
Lone Oak SNP - Reynolds Tract	KSNPC	Grayson	33.53
Jefferson Memorial Forest - Greenwell			
Tract	Louisville Metro Parks	Jefferson	24.055
Morningview Heritage Land - Dunn Tract	Kenton Co Conservation District	Kenton	18.2
Clay Hill Memorial Forest - Straley Tract Lily Mountain Nature Preserve- Arvin &	Campbellsville University	Taylor	50
Hughes Tracts	Estill Co Conservation District	Estill	211.61
		Total:	1,351.94

### **Acronym Legend:**

Wildlife Management Area—WMA Conservation easement—CE Watershed and Wildlife Conservation Area—WWCA

State Nature Preserve—SNP State Forest—SF



Snow geese at Ballard County WMA from the book *Kentucky, Naturally:* The Kentucky Heritage Land Conservation Fund at Work by Thomas G. Barnes

# KHLCF Purchased Properties 1995 – June 30, 2015

County	Project	Agency	Acres
Allen	Carpenter Cave CE	KSNPC	14.30
Ballard	Axe Lake Swamp SNP	KSNPC	311.99
Ballard	Ballard WMA– Harper Tract	KDFWR	256
Ballard	Boatwright WMA	KDFWR	1,177.00
Barren	Brigadoon SNP	KSNPC	91.88
Barren	Mutter's Cave CE	KSNPC	108.28
Bell	Kentucky Ridge SF/WMA	KDF and KDFWR	3,782.38
Bell, Pike, Harlan, Letcher	Pine Mountain Scenic Trail	Kentucky State Parks	553.48
Boone	Boone Cliffs	Boone County Fiscal Court	75.42
Boone	Big Bone Lick State Park—Piner Tract	Kentucky State Parks	236
Boone	Dinsmore Woods	Boone County Fiscal Court	104.52
Boone	Gunpowder Creek	Boone County Fiscal Court	125.98
Boyle	Perryville Battlefield	Kentucky State Parks	75.81
Breckinridge	Wildlife Education Park	Breckinridge County Fiscal Court	25.19
Breckinridge	Yellowbank WMA	KDFWR	1,332.31
Bullitt	Apple Valley Glades SNP	KSNPC	69.23
Bullitt	Knobs State Forest	KDF	1,539.59
Calloway	Blood River SNP	KSNPC	192.56
Calloway	Fort Heiman	Calloway County Fiscal Court	167.00
Campbell	Hawthorne Crossing	Campbell Conservation District	134.69
Campbell	St. Anne Woods	Campbell Conservation District	165.00
Carter	Carter Caves State Park	Kentucky State Parks	107.54
Carter	Olive Hill Reservoir	City of Olive Hill	214.64
Carter	Tygart's State Forest	KDF	255.03
Christian	Bob Overton Cave	KSNPC	54.82
Christian, Caldwell	Pennyrile State Forest	KDF	200.57
Clark	Civil War Earthenworks Fort	Clark County Fiscal Court	25.38
	Lower Howard's Creek Nature and Heritage		
Clark	Preserve	Clark County Fiscal Court	346.59
Daviess	Greenbelt Trail	City of Owensboro	25.00
Daviess	Yellow Creek Park	Daviess County Fiscal Court	1.43
Estill	Lily Mountain	Estill Conservation District	349.54
Estill	Lily Mountain Expansion	Estill Co Conservation District	211.61
Fayette	Raven Run Nature Sanctuary	LFUCG	353.38
Fleming	Clay Wildlife WMA	KDFWR	811.03
Fleming	Park Lake Mountain	Fleming County Fiscal Court	821.13
Fleming	Short's Goldenrod SNP	KSNPC	209.89
Franklin	Cove Springs Park	City of Frankfort	96.99
Franklin	Feindel CE	KSNPC	65.74
Franklin	Julian Savanna SNP	KSNPC	42.43
Franklin	River Cliffs SNP	KSNPC	210.19
Franklin	Rockcress Hills SNP	KSNPC	66.66
Franklin	Swallowfield Baxley Easement	KSNPC	64.35
Garrard	Tom Dorman SNP	KSNPC	802.95
Oarraiu	TOTH DOTHIAN SINF	INDINEC	002.93

# KHLCF Purchased Properties 1995 – June 30, 2015

County	Project	Agency	Acres
Graves	Terrapin Creek SNP	KSNPC	98.60
Grayson	Lone Oak Glade—Reynolds Tract	KSNPC	33.53
Green	Glenview Nature Preserve	Green County Fiscal Court	168.07
Green	Wyatt Jeffries Woods	Green County Fiscal Court	57.15
Hardin	Eastview Barrens SNP	KSNPC	119.14
Hardin	Jim Scudder SNP	KSNPC	172.66
Hardin	Springhouse Barrens SNP	KSNPC	55.78
Harlan	Blanton Forest SNP	KSNPC	1,246.00
Harlan	Hi Lewis Barrens SNP	KSNPC	302.00
Harlan	James E. Bickford SNP	KSNPC	347.84
Harlan	Kentenia State Forest	KDF	762.03
Harlan	Martin's Fork SNA	KDOW	1,624.41
Harlan	Stone Mountain SNA	KSNPC/KDFWR	1,025.49
Harlan	Blanton Forest—Gaines Tract	KSNPC	386
Harrison	Griffith Woods WMA	KDFWR	391.37
Hart	Davis Bend	KDOW	165.00
Hart	Frenchman's Knob	Hart County Fiscal Court	64.00
Hart	Hidden River Cave	City of Horse Cave	9.41
Hart	Rush Island Bottoms	KDOW	160.00
Hart	Upper Green River Biological Reserve	Western Kentucky University	1,524.67
Henderson	Green River State Forest	KDF	409.34
Henderson	John James Audubon State Park	Kentucky State Parks	15.83
Henry	KSU Environmental Education and Research Center	Kentucky State University	305.99
Henry, Owen	Kentucky River WMA	KDFWR	533.28
Hickman	Obion Creek and Murphy's Pond SNP	KSNPC	198.72
Hickman	Three Ponds SNP	KSNPC	528.25
Hickman, Fulton	Obion Creek and Latourneau Woods WMA	KDFWR	1,640.19
Jefferson	Jefferson Memorial Forest additions	Louisville-Jefferson Metro Gov	625.09
Jefferson	Peterson Forest	Louisville-Jefferson Metro Gov	98.13
Jefferson	Pope Lick Park (Tyler Schooling tract)	Louisville-Jefferson Metro Gov	214.65
Jefferson	Putney Pond and Woodlands	City of Prospect	24.31
Jefferson	Jefferson Memorial Forest	Louisville-Jefferson Metro Gov	24
Jessamine	Camp Nelson	Jessamine County Fiscal Court	58.53
Jessamine	Jessamine Creek Gorge	Jessamine County Fiscal Court	268.77
Kenton	Morningview	Kenton County Conservation District	204.41
Kenton	Morningview—Dunn Tract	Kenton County Conservation District	18.2
Larue	LaRue County Environmental Education Center	Larue County Fiscal Court	191.00
Larue	Lincoln Boyhood Home	Larue County Fiscal Court	224.97
Larue	Thompson Creek Glade SNP	KSNPC	105.26
Laurel	Rockcastle Wild River Corridor - Sinking Creek	KDOW	300.97
Laurel	Whitley Branch Preservation	City of London	75.57
Letcher	Bad Branch SNP	KSNPC	1,046.94
Lewis	Crooked Creek SNP	KSNPC	693.47
Lincoln	Bouteloua Barrens SNP	KSNPC	261.00

### KHLCF Purchased Properties 1995 – June 30, 2014

County	Project	Agency	Acres
Lincoln	William Whitley House	Kentucky State Parks	80.24
		Livingston County Fiscal	
Livingston	Livingston County WMA	Court	2429.92
Logan	Baker Natural Area	Logan Conservation District	66.15
		KDFWR,Marion County,	
Marion	Marion County WMA	KDF	1,293.20
McCracken	Perkins Creek	City of Paducah	80.27
McCreary	Little South Fork - Garrison Tract	DOW	136.55
McCreary	Cumberland Falls State Park	Kentucky State Parks	119.00
Menifee	Broke Leg Falls	Menifee County Fiscal Court	14.82
Metcalfe	Dry Fork Gorge	Metcalfe County Fiscal Court	79.97
Metcalfe, Cumberland	Marrowbone State Forest*	KDF and KDFWR	1,955.47
Monroe	Old Mulkey Meeting House	Kentucky State Parks	19.02
Muhlenberg, Hopkins, Ohio	Peabody WMA*	KDFWR	34,560.00
Ohio	Highview Hill	Ohio County Fiscal Court	256.71
Ohio	Nature Park	Ohio County Fiscal Court	191.25
Oldham	Morgan Conservation Park	Oldham County Fiscal Court	227.59
Powell	Natural Bridge State Park	Kentucky State Parks	471.00
Powell	Pilot Knob	Powell County Fiscal Ct.	515.93
Pulaski	Buck Creek Preserve	Pulaski County Fiscal Court	35.26
Pulaski	Hazeldell Meadow	Pulaski County Fiscal Court	39.35
Pulaski	Mount Victory Seeps	KSNPC	150.43
	WH Martin Wildlife and Watershed		
Pulaski	Conservation Area	KDOW	458.96
Robertson, Nicholas, Fleming	Blue Licks State Park*	Kentucky State Parks	905.45
Shelby	Clear Creek Park Greenway	Shelby County Fiscal Court	27.02
Shelby	Shelby Trails Park Addition	Shelby County Fiscal Court	75.00
Simpson	Flat Rock Glade	KSNPC	29.97
Taylor	Clay Hill Memorial Forest	Campbellsville University	103.00
Taylor	Clay Hill Memorial Forest - Straley	Campbellsville University	50
Taylor	Tebbs Bend	Taylor County Fiscal Court	172.14
Union, Crittenden	Big Rivers Corridor*	KDFWR and KDF	6,724.00
Warren	Cave Springs	Western KY University	2.01
Warren	Lost River Cave	Warren County Fiscal Court	2.25
	Little South Fork Corridor - Burnett &		
Wayne, McCreary	Self WWCA	KDOW	1,883.00
Whitley	Archer-Benge SNP*	KSNPC	1,863.00
Wolfe	Red Wild River Corridor	KDOW	301.26
		TOTAL	87,974.71

<sup>\*</sup>Other funding sources used as match \*\*All costs associated with these projects are for the protection, not purchase, of land. Examples are conservation easements, surveys, mineral estates.

## **FY 2015 Stewardship Awards**

At the September 2014 Governor's Conference on Energy and the Environment the KHLCF presented the annual KHLCF Stewardship Awards to Eastern Kentucky University for their management of Lilley Cornett Woods and Pine Mountain Settlement School for their management of the James Bickford Nature Preserve, both funded in part by the KHLCF.



Lilley Cornett Woods was the first old growth forest remnant protected in Kentucky and is listed as a Registered Natural National Landmark by the U.S. Department of the Interior. The old growth forest occurs on 252 acres and has never been commercially logged. The old growth protects an excellent example of a mixed mesophytic forest with 72 woody plant species occupying this forest community. More than 530 plant species have been documented in various studies. Long term ecological and biological research investigations have taken place at Lilley Cornett Woods since the 1970s. The site is open to public only by guided tours by appointment through the EKU Division of Natural Areas.

Founded in 1913 as a boarding school for the elementary and middle school children of the southeastern Kentucky mountains, Pine Mountain Settlement School has a mission of providing environmental education and traditional arts and culture to more than 3,000 participants annually. Listed on the National Register of Historic Places, the nature preserve component of the school protects a high quality Appalachian mesic forest on the north slope of Pine Mountain and protects numerous rare species including state endangered fetterbush, state threatened American golden saxifrage, Loesel's twayblade, and state special concern rock harlequin in addition to the state special concern Masked shrew. In addition, several endemic cave invertebrates including Roger's

cave beetle, scholarly cave beetle, and undescribed cave-obligate freshwater isopod and un-described cave-obligate millipede are also found here. As with typical Appalachian mixed-mesophytic forest, no one tree species dominates the canopy and 27 tree species have been found in canopy, including many mature and large trees. More than 615 species of plants have been documented here and the spring wildflower display is diverse as more than 130 spring wildflowers including wood poppies, dwarf larkspur, spotted and yellow mandarin, large flowered trillium and purple wake robins, large flowered bellwort, wild geranium, bloodroot, dwarf crested iris, and speckled wood lily occur in abundance.



Site descriptions adopted from the book *Kentucky, Naturally:*The Kentucky Heritage Land Conservation Fund at Work by Thomas G. Barnes

# FY 2015 Approved Projects

A total of 11 project applications were reviewed by the KHLCF Board in FY 2015, and 10 were approved at some level of funding. Funding awards totaling \$1,691,522 were approved for the proposed acquisition and management of more than 1,000 acres located throughout the state out of a total of \$2,668,010.00 requested. Local governments/university projects were approved in Letcher, Clark, and Fleming counties. State agency projects were approved in Harlan, Bell, Bullitt, Nicholas, Whitley, Letcher counties.

Funds came from current year receipts plus funds from previously approved projects that could not be acquired. All funding awarded was for land purchase and associated pre-acquisition costs (appraisals, title, and survey work). No management activities were funded for these new projects.

GRANTS AWARDED	COUNTY	AWARD
<u>Competitive</u>		
Lower Howard's Creek - Clark Fiscal Court—Hegeman Tarct	Clark	
Park Lake Nature Preserve—Fleming Fiscal Court—Browning Tract	Fleming	
Park Lake Nature Preserve—Fleming County—Wildcat Hollow	Fleming	
Lilley Cornett Woods—Eastern Kentucky University—Expansion 2 Additional	Letcher	
Funds		
Total Competitive		\$ 255,400
State Agency Grants		
Kentucky State Nature Preserves Commission		
Blanton Forest SNP-Gaines Tract Additional Funds	Harlan	
Bad Branch SNP- Wagner additional funds	Letcher	
Total Kentucky Nature Preserves Commission		\$ 51,322
Department of Parks		
Pine Mountain Trail—Chained Rock Preaquisition	Bell	
Blue Licks State Park-Kingsolver Tract	Nicholas	
Cumberland Falls Land Swap	Whitley	
Total Department of Parks		\$ 84,800
Division of Forestry		
Knobs State Forest -Kuhns/KNLT Additon	Bullitt	
Total Division of Forestry		\$ 1,300,000
Total State Agencies		\$ 1,436,122
GRAND TOTAL		\$ 1,691,522

# **FY 2015 Approved Projects**

A total of 11 project applications were reviewed by the KHLCF Board in FY 2015. Funding awards totaling \$1,705,721.77 were approved for the proposed acquisition and management of more than 1,000 acres located throughout the state out of a total of \$2,668,010.00 requested. Local governments/university projects were approved in Letcher, Clark, and Fleming counties. State agency projects were approved in Harlan, Bell, Bullitt, Nicholas, Whitley, Letcher counties.

### Local Governments, Universities, and Nonprofit Land Trusts

### <u>Lilly Cornett Woods—Expansion 2—Eastern Kentucky University</u>

Letcher County's Lilley Cornett Woods is one of only two old-growth forests left in Kentucky. Managed by Eastern Kentucky University since the 1970's, "Lilley's Woods" is host to many long-term ecological research and biodiversity oriented projects. This grant award was to acquire mineral rights to the previously awarded Ledford-Craig project. EKU received the 2015 KHLCF Stewardship Award for management of the previously funded property at Lilley Cornett Woods.

### Lower Howard's Creek—Hegeman Tract—Clark County Fiscal Court

Lower Howard's Creek Preserve will add approximately 15 acres to the previous acquisitions. This will be devoted to preserve the natural and cultural resources near the Kentucky River. This property contains important water resources, gentle forested slopes, and an access road from a county road which will allow emergency access to the north-eastern reaches of the Preserve. This tract will be managed as part of the existing nature sanctuary and heritage interpretation preserve. Upon acquisition of this tract, the KHLCF will protect nearly 400 acres at Lower Howard's Creek. Clark Couty Fiscal Court received the 2011 KHLCF Stewardship Award for management of the previously funded property at Lower Howard's Creek.

### Park Lake Mountain Nature Preserve—Browning Tract—Fleming County Fiscal Court

The Browning Tract will add an additional 40 acres to the previous acquisitions at Park Lake Mountain. This tract will be used for fishing, hiking, wildlife viewing, educational timber identification and photography. The KHLCF already protects over 800 acres at Park Lake Mountain.

### Park Lake Mountain Nature Preserve—Wildcat Hollow Tract—Fleming County Fiscal Court

The Wildcat Hollow Tract will add an additional 59 acres to the previous acquisitions at Park Lake Mountain. This tract will be used for hiking, wildlife viewing, educational timber identification and photography. The KHLCF already protects over 800 acres at Park Lake Mountain.

### **Kentucky State Nature Preserves Commission**

### Bad Branch SNP—Wagner Tract—Letcher County

The Wagner Tract will add approximately 125 acres to the nature preserve and protect additional acreage on the diverse north face of Pine Mountain. This would also allow protection of several rock shelters and head water streams to the north fork of the Kentucky River. This acquisition would provide a buffer for the preserve and the Pine Mountain State Scenic Trail.

### Blanton Forest—Gaines Tract—Harlan County

The Gaines Tract is located on the south face of Pine Mountain protecting a second growth forest typical of the drier south face, and it encompasses portions of Sam Howard Branch and another unnamed stream. This project will add to the existing Blanton Forest State Nature Preserve that is currently protecting 3,124 acres of old growth and second growth forests. This project is a partnership with the Kentucky Natural Lands Trust.

# **FY 2015 Approved Projects**

### .Kentucky State Parks

### Blue Licks State Park—Kingsolver Tract—Fleming County

The Kingsolver Tract is approximately 16 acres that borders the Blue Lick Battlefield State Resort Park on US 68 and includes frontage on the Licking River. Approximately 10 acres are forest and 6 acres are fields. The main purpose of this property is to protect the natural scenery and encroachment issues upon the park boundary. The tract is adjacent to KHLCF tracts protecting the Federally endangered plant Short's goldenrod (*Solidago shortii*).

### Cumberland Falls Land Swap—Whitley and McCreary Counties

The United States Forest Service has approximately 342 wooded acres adjacent to Cumberland Falls State Resort Park in Whitley and McCreary Counties that will be exchanged for Kentucky Wild Rivers property in Laurel County. This tract will increasing hiking trail access.

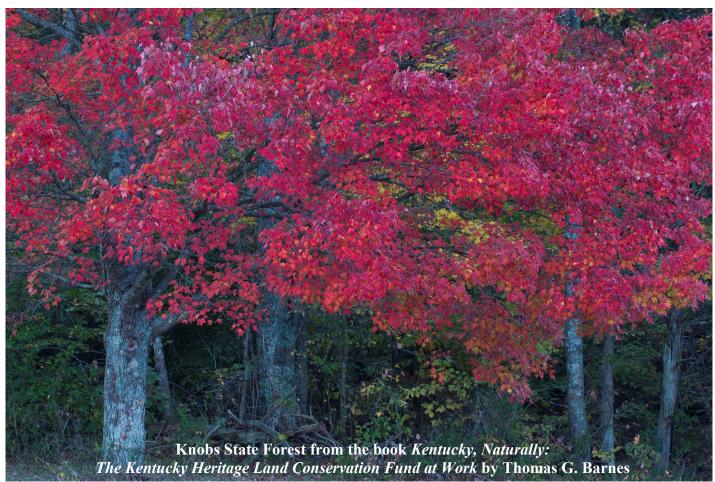
### Pine Mountain Trail—Investigation—Bell County

Costs associated with investigating land in Bell County at Pine Mountain State Park.

### Kentucky Division of Forestry

### Knobs State Forest—Kuhns/KNLT Addition—Bullitt County

Kuhns/KNLT Addition is approximately 541 acres: 481 of upland forestland, 35 cares of native grass and 25 acres pasture lands. This will provide connectivity of the existing Knobs SF/WMA, Crooked Creek Boy Scout Camp, and Bernheim Forest and Arboretum. It is part of the larger Bernheim/Ft Knox Forest Corridor project. This grant will be used to match a federal Forest Legacy grant application.



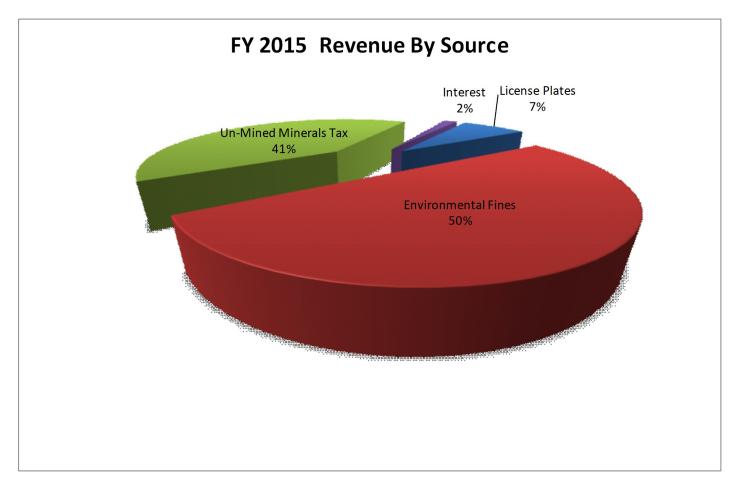
### **Financial Information**

Funding for the KHLCF is generated from the sale of three nature license plates, the state portion of unmined mineral tax on coal, environmental fines, and interest income. For FY 2015 receipts were \$4,999,058.17, which does not include the \$550,000 the KHLCF transfers administratively to KEEC and DEDI by statute but is not part of the KHLCF program. The KEEC receives the first \$150,000 collected from environmental fines and DEDI receives the first \$400,000 of unmined minerals taxes and the KHLCF receives the remainder from both sources for natural areas land acquisition.

In FY 2015 the current state budget swept \$5,000,000 from the KHLCF into the state General Fund, therefore creating a deficit of \$941.83 for FY 2015. Awards made on pages 10-12 were made from a combination of revenue held over from previous years and funds returned from withdrawn projects.

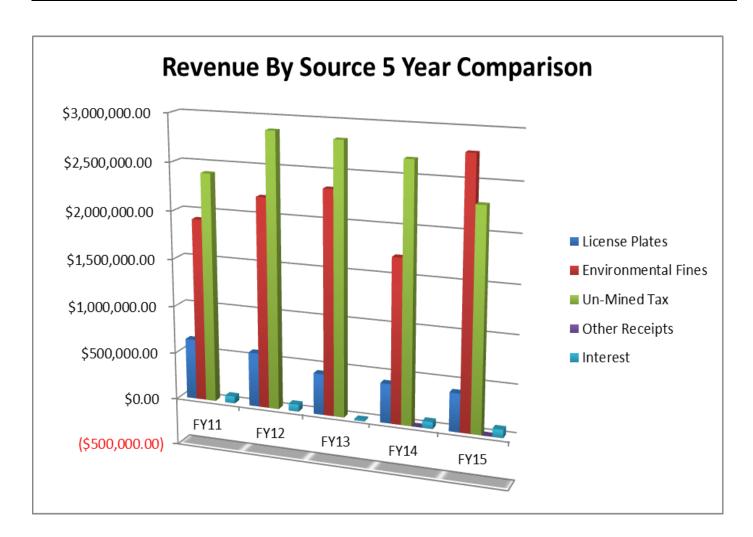
The total revenue for FY 2015 was approximately \$678,934.43 greater than FY 2014 levels. As shown on the page 14 table, revenue generated from unmined mineral tax revenue decreased by \$389,853.47 and license plate sales revenue continued to decline as well; revenue generated from nature license plates sales fell by \$10,252 from FY 2014, while interest income increased by \$14,015.64 and environmental fines increased by roughly \$1,064,022.96

The table also demonstrates the volatility and unpredictability of our revenue sources from year to year. During the last five years, revenue from fines has seen a steady increase for four years and a sharp decrease in FY 2014, while revenues from unmined minerals has increased from FY 2009 to FY 2012, but decreased in FY 2013 to FY 2015.



# **KHLCF** Revenue

	<b>Revenue</b>	By Source 5 Y	ear Comparis	<u>son</u>	
5-Year Receipts by Source	FY11	FY12	FY13	FY14	FY15
License Plates	\$638,470.00	\$571,970.00	\$431,100.00	\$412,370.00	\$402,118.00
Environmental Fines	\$1,918,713.00	\$2,199,707.55	\$2,332,183.04	\$1,709,372.74	\$2,773,395.70
Un-Mined Tax	\$2,399,253.00	\$2,870,185.73	\$2,820,757.75	\$2,676,911.60	\$2,287,058.13
Other Receipts				\$71.00	\$945.00
Interest	\$74,111.00	\$74,110.72	(\$14,432.57)	\$71,525.70	\$85,541.34
Statutory transfers to KEEC and DEDI	(\$550,000.00)	(\$550,000.00)	(\$550,000.00)	(\$550,000.00)	(\$550,000.00)
Transfer to General Fund					(\$5,000,000.00)
TOTAL	\$4,480,547.00	\$5,360,734.00	\$5,019,608.00	\$4,320,251.00	(\$941.83)



### KENTUCKY'S RETURN ON INVESTMENT IN THE

### KENTUCKY HERITAGE LAND CONSERVATION FUND







TERRY COOK, DCRJSR\*, MARK GODFREY

Fund (KHLCF) has conserved over 86,000 for local governments. acres in 125 sites across 67 counties. The Trust for Public Land conducted research summarizing and quantifying the economic benefits of KHLCF investments to local communities between 1998 and areas, 2011.

Projects made possible by the KHLCF support hundreds of thousands of jobs across Kentucky. Additionfor Public Land.

### Realizing a Valuable Return on Investment: Natural Goods and Services

KHLCF provide a host of economic benefits that have ians. State and local governments received \$1.23 bila measurable impact to the Commonwealth of Kentucky and its communities. They include services such as drinking water protection, flood control, wildlife habitat, and air pollution removal.

- The Trust for Public Land conducted an analysis of the economic value of natural goods and services provided by KHLCF protected lands and waters between 1998 and 2011. For every \$1 of KHLCF funds invested, \$8 in economic benefits is returned to the Commonwealth of Kentucky.1
- The results are consistent with similar studies conducted by The Trust for Public Land in over a dozen states that found comparable returns on investment in land and water conservation programs.

In addition to providing natural goods and services, KHLCF contributes to the Kentucky economy in terms of generating jobs and strengthening local econ-

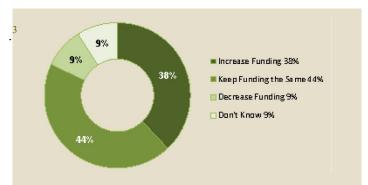
he Kentucky Heritage Land Conservation omies, providing clean water, and boosting the bottom line

### Generating Jobs and Strengthening Local Economies

The parks, trails, state forests, wildlife management

and nature preserves conserved with KHLCF funding supports the outdoor recreation and tourism industries.

- Outdoor recreation is a major component of Kenally, for every \$1 invested in land and water conservatucky's economy. Each year it generates \$8.4 billion tion, \$8 in natural goods and services is returned to the in consumer spending, \$552 million in state and local Commonwealth of Kentucky according to The Trust tax revenue, 105,000 jobs, and \$2.5 billion in wages and salaries in the state.<sup>2</sup>
- The tourism and travel industry contributed over \$12.2 billion to Kentucky's economy in 2012. Visitors supported 174,000 jobs in local communities account-Natural lands and water resources conserved by ing for \$2.7 billion in wages and salaries for Kentucklion in tax revenue



82% of Kentuckians think conservation funding should stay the same or increase.

77% of voters believe we can have a clean environment and a strong economy at the same time.

Source: Bipartisan statewide voter survey conducted December 2013.

### **KHLCF Related Article**

### **Providing Clean Water**

Kentucky's forests and open lands play a vital role in the provision of clean drinking water supplies. They reduce the costs of treating wastewater and stormwater, as well as the costs of treating drinking water supplies.

- A study conducted in 2009 by the northern Kentucky Sanitation District No. 1 found that 'green' controls, such as protecting watershed lands, provide substantial improvements in water quality relative to their cost compared to traditional stormwater treatment controls to correct sewer overflows (i.e., pipe replacement and water treatment plants).<sup>4</sup>
- Costs of treating drinking water supplies have been found to be directly related to the amount of tree cover in the area. Specifically, costs are higher when there is less tree cover. An area with only 10 percent forested land had annual treatment costs of \$923,000 compared to \$297,000 for an area with 60 percent tree cover.<sup>5</sup>

### Boosting the Bottom Line for Local Governments

Land and water conservation provides a fiscal benefit to both residents and municipalities through cost sav-

ings on infrastructure and services.

- Studies of Kentucky counties consistently show that unlike residential land, working and open lands generate more in public revenues than they receive back in public services. For example, for every \$1 paid in local taxes, working and open land in five Kentucky counties (i.e., Campbell, Kenton, Lexington -Fayette, Oldham, and Shelby) required an average of \$0.53 in services compared to an average of \$1.26 in services for the average home.
- The national median across 151 communities over 25 years is that for every \$1 paid in local taxes, farmland and open space require \$0.35 in services compared to \$1.16 in services for the average home.<sup>7</sup>



KENTUCKY DIVISION OF WATER PHOTO

#### **End notes**

- 1. This analysis is based on the best available data at the time of publication. Ohio data were utilized for the underlying carbon storage and sequestration volumes for cropland, pasture, and grassland. For a full methodology description see "The Economic Benefits of Clean Ohio Fund Conservation" report available at http://www.tpl.org/economic-benefits-clean-Ohio-fund-conservation-report. Sources: Molly Ingraham and Shonda Gillialand Foster, "The Value of Ecosystem Services Provided by the U.S. National Wildlife Refuge System in the Contiguous U.S." (Ecological Economics, 67, 2008, pp. 608-618); Interagency Working Group on Social Cost of Carbon, United States Government, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (revised November 2013); M. Jarecki and L. Rattan, "Soil Organic Carbon Sequestration Rates in Two Long-Term No-Till Experiments in Ohio" (Soil Science 170, no. 4, 2005, pp. 280-291); J. Lewandrowski, M. Peters, C. Jones, R. House, M. Sperow, M. Eve, and K. Paustian, Economics of Sequestering Carbon in the U.S. Agricultural Sector (USDA Economic Research Service, Technical Bulletin No. TB-1909, 2004); D. J. Nowak and E.J. Greenfield, Urban and Community Forests of the South Central East Region. (USDA Forest Service General Technical Report NRS-58. 2009); P. Puget and R. Lal, "Soil organic carbon and nitrogen in a Mollisol in central Ohio as affected by tillage and land use" (Soil & Tillage Research 80, no. 1-2, 2005, pp. 201-213); The Trust for Public Land, Conservation Almanac (Available at http://www.conservationalmanac.org); U.S. Department of Agriculture, "Grassland Reserve Program Rental Rates" (accessed February 26, 2014, http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs144p2\_026909.pdf);U.S. Department of Agriculture, National Agricultural Statistical Service, "Data and Statistics" (accessed February 26, 2014, http://www.nrcs.usda.gov/? sector\_desc=ECONOMICS&commodity\_desc=RENT&agg\_level\_desc=COUNTy
- 2. Outdoor Industry Association, *The Outdoor Recreation Economy: Kentucky* (2012).
- 3. Kentucky Tourism, Arts and Heritage Cabinet, Economic Impact of Kentucky's Travel and Tourism Industry 2011 and 2012 (Prepared by CERTEC, Inc. May 2013).
- 4. Third Rock Consultants, LLC, Kentucky Statewide Assessment of Forest Resources and Strategy (Produced in conjunction with the Kentucky Department of Natural Resources, Division of Forestry, 2010).
  5. Ibid.
- 6. American Farmland Trust, Cost of Community Services Fact Sheet (Northampton, Massachusetts: Farmland Information Center, 2010).
- 7. Ibid.
- \* KY State Tree, Tulip Poplar. By Dcrjsr/Gallery of Duke Forest Plants from Wikimedia Commons. http://commons.wikimedia.org/wiki/File:Liriodendron\_tulipfera\_tulip\_close.jpg



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Prepared by The Trust for Public Land with support from the Doris Duke Charitable Foundation and Conserve Kentucky.

# **Kentucky Environmental Education Council**



# Kentucky Environmental Education Council Executive Summary FY 2015 Annual Report to the Heritage Conservation Land Fund Board

The Kentucky Environmental Education Council (KEEC) has the broad mandate of ensuring an environmentally literate citizenry by coordinating environmental education in the Commonwealth of Kentucky. Environmental literacy is defined as having the ability to recognize the components of healthy natural and man-made systems and the actions necessary to maintain, restore, or improve them. Agency resources and programs are designed to connect people to nature, increase awareness of and access to sustainability initiatives, and offer resources that help educators use the environment as a theme for teaching all subject areas. This report highlights some of KEEC's Fiscal Year 2015 accomplishments.

### Land, Legacy and Learning IV

KEEC released *Land, Legacy and Learning IV*, which includes the 2015-2020 Master Plan for Environmental Education in Kentucky and the 2014 Survey of Kentuckians' Environmental Knowledge, Attitudes and Behaviors. Developed with the help of the Kentucky Association for Environmental Education and the Kentucky University Partnership for Environmental Education, and more than 175 individuals who participated in 13 regional meetings across Kentucky, the 2015-2020 Master Plan outlines goals and objectives to guide the direction of environmental education in Kentucky, per KRS 157.915(1). As in previous iterations, the survey of Kentuckian's Environmental Knowledge, Attitudes, and Behaviors indicated that 96% of Kentuckians believe that environmental education should be taught in schools. A significant percentage of Kentuckians do not connect personal actions with environmental impact, but do want to know about environmental problems.

#### **Professional Environmental Educator Certification Course**

The Kentucky Environmental Education Council offered the Professional Environmental Educator Certification course thanks in part to a \$10,000 grant from Toyota Motor Manufacturing of Kentucky. The grant assisted KEEC with course expenses and provided scholarships for many of the 20 graduates of the 2014-15 course. Since 2004, KEEC has certified 186 environmental educators from across the Commonwealth. Certified educators work in state agencies, state parks, national parks, educational non-profits, nature centers and zoos, extension offices, schools, colleges and universities, libraries and other institutions that educate Kentuckians on their relationship to the natural world. The course follows the *Guidelines for the Preparation and Professional Development of Environmental Educators* created by the National Project for Excellence in Environmental Education through the North American Association for Environmental Education (NAAEE). In July 2014, KEEC submitted its application to NAAEE for accreditation of the course. A decision on the application is expected in FY2016. Due to budget constraints, KEEC will be unable to offer the course in FY2016, but it is building a waiting list for FY2017 participants.

### **Kentucky Green and Healthy Schools Program**

The Kentucky Green and Healthy Schools program is a project-based program that empowers students and faculty to improve the safety, health, and sustainability of their schools. Since KEEC started the program in 2007, 268 schools in 73 counties have enrolled. This year, KEEC proudly presented a total of eight awards to schools enrolled in the program, from Pikeville to Warren County. Leslie Meredith of Hardin County Schools received the teacher of the year award.

#### **Pride Funds**

Per KRS 224.43-500, KEEC distributed funds provided through a bond measure called the Pride fund to the Kentucky University Partnership for Environmental Education. The funds are used to implement environmental education at the university level.

#### **Kentucky Environmental Literacy Plan**

KEEC continues to lead implementation of the Kentucky Environmental Literacy Plan (KELP), a collaborative effort between KEEC, the Kentucky Department of Education (KDE), the Kentucky Association for Environmental Education (KAEE), and several partner organizations. In FY2015, KAEE received several grants to support the KELP Implementation Advisory Team as it continues its ground-breaking work in correlating national environmental education standards with national education standards, including the Next Generation Science Standards. The KELP is available at keec.ky.gov/publications and correlation to the standards is explained at eelinked.naaee.net/n/guidelines.

### **Interagency Subcommittee on Environmental Education**

Per KRS 157.915, the agency convenes an Interagency Subcommittee on Environmental Education (ISEE), which met quarterly in FY2015. Much of the committee work in this fiscal year focused on state agency implementation of the 2015-2020 Master Plan for Environmental Education. A list of active agency committee members is at keec.ky.gov/Meetings/Pages/ISEE.aspx.

# **Department for Energy Development and Independence Coal Education Awards**

#### **Green Ribbon Schools Tour**

In partnership with the U.S. Department of Education, KEEC coordinated a tour of central Kentucky schools that have been named U.S. Green Ribbon Schools. National, state and local officials toured Northern Elementary and Georgetown Middle in Scott County and Rosa Parks Elementary, Wellington Elementary and Locust Trace AgriScience Farm in Fayette County. Green Ribbon schools are recognized for reducing environmental impact and costs; improving the health and wellness of schools, students and staff; and providing environmental education among many disciplines.

### Earth Day

KEEC partnered with the Energy and Environment Cabinet and the First Lady's office to coordinate the 2015 Earth Day celebration at the Kentucky History Center. The First Lady recognized several Kentucky Green and Healthy Schools awardees. She also recognized the three 2015 Kentucky nominees for the U.S. Green Ribbon Schools award: Bryan Station Middle (Fayette County), Royal Springs Middle (Scott County), and along with the Council of Postsecondary Education President Bob King, recognized the first Kentucky post-secondary nominee, Western Kentucky University.

### **Capitol Education Center**

The KEEC continues to play a leadership role in development of the Capitol Education Center (CEC), a special project initiated by Kentucky's First Lady, Jane Beshear. The CEC Grand Opening occurred in February 2013. Hands-on exhibits, touch screen kiosks, and demonstration technologies featured at the CEC cover topics such as sustainability, civic engagement, history, geography, and tourism in Kentucky. For her work on the Capitol Education Center, among other initiatives, KEEC Executive Director Elizabeth Schmitz received the 2015 Earth Day Recognition Award from the Kentucky Environmental Quality Commission.



#### FY 2015 Public Education on Coal Related Issues

Kentucky Revised Statute 132.020(5) authorizes funding to the Energy and Environment Cabinet from the unmined minerals tax collected each year for the purpose of public education of coal related issues. DEDI has the responsibility to solicit proposals each year from non-profit agencies having the experience and expertise to successfully conduct programs or activities. Activities for the projects awarded in FY 2015 are highlighted below.

#### University of Kentucky, Center for Applied Energy Research

- Carbon Management Research Group, \$1,000,000: Continue development of utility flue gas CO2 capture demonstration unit.
- Microalgae-based CO2 capture and recycle, \$125,000
- Coal-fueled pressurized chemical looping combustion, \$125,000

### University of Kentucky, Department of Mining Engineering

• Evaluation of Kentucky coal waste slurries for rare earth elements, \$75,000

### **University of Louisville**

• Conversion of coal exhaust to renewable transportation fuel, \$50,000

### Kentucky Heritage Land Conservation Fund Board Members

The 12-member board was established by the Kentucky General Assembly in 1994. Five members are appointed from state government agencies, one each from the Department for Natural Resources, the Department of Fish and Wildlife Resources, the Department of Parks, the Kentucky State Nature Preserves Commission, and the Environmental Education Council. Seven members are private citizens selected by the governor from nominations by conservation groups, the Kentucky Academy of Science, agricultural interests and natural resources industries. Dr. Richard K. Kessler has been appointed by the governor to serve as chairman of the board. The citizen members do not receive pay for attending quarterly board meetings and serving on the active committees of the board. The committees review applications and visit project sites, review and monitor site stewardship, and provide advice and recommendations on issues coming before the board.

The Kentucky Heritage Land Conservation Fund Board is staffed by the Department for Natural Resources. Comments regarding this report should be addressed to:

### **Kentucky Heritage Land Conservation Fund Board**

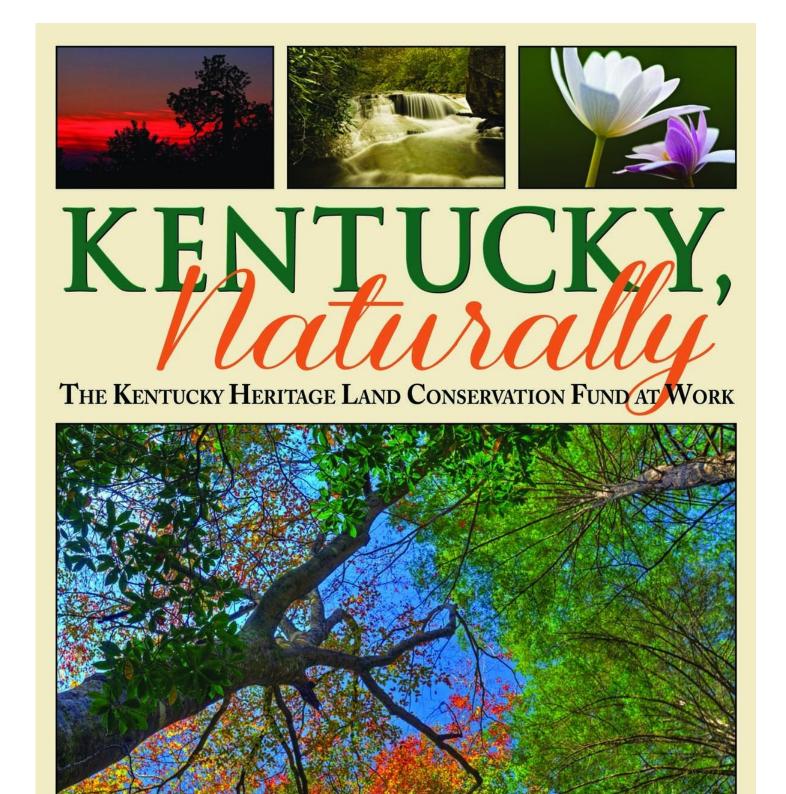
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Hugh Archer - KHLCF Stewardship Committee Chair
Land Acquisition Expert
Term Expires: July 15, 2018
Steve Hohmann
Ex Officio Member
Commissioner, Department for Natural Resources
Greg Johnson
Ex Officio Member
Commissioner, Department of Fish and Wildlife Resources
Dr. Richard K. Kessler - KHLCF Board Chair
Kentucky Academy of Science
Term Expires: July 15, 2017
Dr. Albert Meier - KHLCF Project Committee Chair
Kentucky Academy of Science
Term Expires: July 15, 2016
Elaine Walker
Ex Officio Member
Commissioner, Department of Parks

**Kentucky, Naturally: the Kentucky Heritage Land Conservation Fund at Work** is a compilation and celebration of the properties that have been purchased with the assistance of KHLCF money during the first 20 years of the program. Award-winning Kentucky nature photographer Dr. Thomas G. Barnes displays hundreds of beautiful photographs of the state's protected lands and provides detailed descriptions of each site, including the natural flora and fauna. Through the KHLCF and public support, Kentucky's abundant natural resources and beauty can be treasured and protected for all to enjoy. Available now at your local bookstore and online.



THOMAS G. BARNES