



# THINGS THAT FLY

2019 Conservation Writing and Jim Claypool Art Contest



CELEBRATING 75 YEARS!

Kentucky Farm Bureau Federation // Kentucky Association of Conservation District  
Kentucky Division of Conservation

# PLANT THEM AND THEY WILL COME



If you want to see and hear birds around your home, swap some of your manicured lawn for some trees that will have your yard bursting with bird songs. To attract birds to your home, it's all about location, location, location...of food and shelter. Birds need native plants, which host native insects, to thrive. If you plant some trees, the birds will come.

Kay Charter, Founder and Executive Director of Saving Birds Thru Habitat, has some encouraging words on every individual's effort to attract birds and provide habitat:

"Every single person who owns a piece of property of any size can make a difference. They can begin by removing non-native plant species on their land and replacing them with natives. Why native plants? Native plants are important for many reasons, but they are essential as virtually the only hosts for many native insects. Insects are essential food for many birds, particularly nesting songbirds. ... A small yard, even in the heart of a city, can provide these crucial sites."

Here are some insect-friendly native trees that you can plant on your property that will attract birds and make your home a wintering, migrating, breeding habitat for our feathered friends.

## OAKS

Beautiful oaks are host to more caterpillars than any other tree. Therefore, no other plant genus supports more species of butterflies and moths, a key food source for birds. Blue jays and crows also enjoy the high-protein of the oaks' acorns. There are over 20 species of oaks in Kentucky so you're sure to find a favorite.

## CHERRIES

Native cherries, such as black cherry, provide not only food for birds but leaves that feed many types of caterpillars, from the large and striking cecropia moth to the abundant eastern tent caterpillar. Cuckoos, orioles, and many other woodland birds feed on tent caterpillars, while gnatcatchers pull away some of the caterpillar nests' silk for their own cup nests.

## BIRCHES

The sap from birches are a feast for some winged wildlife, especially butterflies like mourning cloaks, anglewings and wood nymphs. Insects attracted to the sap become a meal for nuthatches, woodpeckers, chickadees and other insect-eaters that search nooks and crannies for grubs, ants and other bugs. The birch is the host plant for more than 400 species of butterflies and moths. The adaptable river birch is one of our favorites.

## DOGWOODS

Giant silk moths and several species of butterflies favor dogwoods as host plants. The trees' spring flowers also provide nectar to bees and other pollinating insects, including spring azure butterflies. American robins, northern mockingbirds and sparrows will build nests on the trees' horizontal branches, and many others seek shelter in leaves. Moreover, there's the high-fat, fleshy and red fruit that more than 35 species of birds will eat, including northern cardinals, tufted titmice, bluebirds, juncos and waxwings. There are many native dogwoods in Kentucky including the flowering, silky, rough-leafed and grey.

## HOLLIES

These evergreen trees provide year-round shelter, nesting places, and berries that ripen in the late fall and even into winter, making it a favorite food source for overwintering birds. This tree is a favorite of robins, cedar waxwings, eastern bluebirds, catbirds, mockingbirds, cardinals, and the hermit thrush. The American holly is native to Kentucky. (Although birds love them, remember that holly berries are toxic to humans and pets.)

## MULBERRY

One of the quickest ways to invite birds to your yard is to plant a mulberry. In summer, birds flock to the fruits, after insects have crowded spring flowers. The trees also make excellent places for birds to nest. Choose the native red, not the invasive, introduced white mulberry.

## EASTERN REDCEDAR

These trees are important because they are in the conifer family meaning they keep their needles all year. These trees produce berry-like fruiting bodies and year-round cover. Eastern redcedar fruits are a staple for cedar waxwings. The indigo bunting and the catbird use strands of cedar bark in their nests. In spring, various birds seek out the redcedar as a nesting spot because of the dense cover it provides. In winter, it provides a sheltered roosting place for many songbirds, including juncos, sparrows and myrtle warblers.

## VIBURNUMS

These shrubby trees grow in the forest understory. Many butterflies and moths host on viburnums during their caterpillar phase and overwinter in the leaf litter. The fruits are popular with cardinals, Eastern bluebirds, robins and cedar waxwings. Plant a native nannyberry viburnum, and you will have plenty of birds.

## SERVICEBERRY

It's hard to beat the downy serviceberry for beauty and bird appeal. The succulent berries have a blueberry-like flavor and are a staple to cedar waxwings, robins, catbirds, mockingbirds and thrashers. The birds will put on a show when the berries ripen that will be worth the effort of planting this native tree.

## PINES

These trees are also in the conifer family. Birds and other animals will use pines in the winter for protection from harsh weather. These trees provide food, shelter, and nesting sites for many birds. Chickadees, warblers, yellow-bellied sapsuckers, goldfinches, turkey, doves, and the white-breasted nuthatch enjoy the seeds. Carolina chickadees, nuthatches, and woodpeckers, because of its soft bark that makes excavating a nest hole quick and easy, favor it. Tall mature pines are a favorite nest site of American bald eagles. Plant an eastern white, shortleaf or Virginia pine for all year bird watching.



Photo courtesy of Gypsy Flores



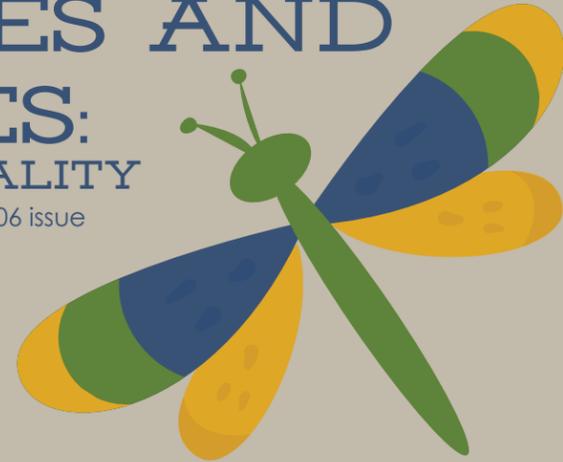
Photo courtesy of Nick Shearman



Photo courtesy of Linda Bumpus

# DRAGONFLIES AND DAMSELFLIES: THE MYTH AND THE REALITY

Reprinted with permission, Kentucky Afield, summer 2006 issue



With huge compound eyes, long spiny legs and needle-like bodies, it's understandable how dragonflies and damselflies have been the subject of so much myth and folklore. Names like "Devil's darning needle," "Devil's horse," and "horse stinger" have followed these insects throughout history. Yet they do not sting, nor do they sew up the mouths and ears of bad boys as legend has it. In fact, they are not only harmless, but they actually are extremely beneficial. Both dragonflies and damselflies have a voracious appetite for mosquitoes,

gnats, deerflies and horseflies. In turn, they are food for fish, birds and frogs.

In Kentucky, there are many common dragonfly and damselfly species of various colors and sizes, all with similar habits. Most deposit their eggs in the water. After hatching, their nymphs live underwater until they mature, climb out of the water and emerge from their casing. After their body and wings dry and harden, they fly away to hunt and mate.

Dragonflies spend most of their adult lives in the air. With all four wings able to move independently, their aerial antics are impressive as they fly at high speed, sideways or backward, pivot and hover. Everything is done while airborne, including eating and mating.

Dragonflies will often find any convenient rest to watch for their next victim. A dragonfly's wings open horizontally when they are at rest.



Photo courtesy of B. Newton

Dragonfly nymphs are aquatic and have internal gills, through which they can draw in water then expel it. The expelling of water also serves as a form of propulsion. Damselfly nymphs have external gills at the tip of the abdomen. Both are aggressive ambush hunters equipped with a modified lower jaw that shoots out to spear insects and other small creatures.

Damselflies adults are often brilliantly colored, slender and delicate, with an uncertain, fluttering flight. They fold their wings back over their bodies when at rest.



Photo courtesy of B. Newton



Photo courtesy of B. Newton



# WILDLIFE AND SOILS

Wildlife and soils. Did you ever think that they went together? And how are they dependent on one another? Let's take a look. Soil is much more than sand, silt, and clay. Soil also contains organic material such as plant roots, stems, and leaves, both growing and decaying. Soil also contains billions of living microscopic organisms such as bacteria, fungi, algae, and protozoa.

Soils also contain larger organisms including earthworms, mites, nematodes, ants, and other insects that spend a lot of their life in the soil. Larger animals may even call soil their home, such as rabbits, moles, mice, snakes, ground hogs, badgers, foxes and coyotes. There is even one species of owl that nest in the ground.

Soils not only provide homes and shelter to animals, they also provide the essential components to grow plants which in part provides shelter, food, oxygen, warmth in the winter and coolness in the summer. As you can see, soil is responsible for much of the habitat in which the animals live.

When animals dig burrows and dens in the soil, this allows for oxygen

and air to flow easily through the soil. When gophers and other ground dwelling animals use these holes for protection, they are also performing functions which allow our agriculture crops to grow better. They mix soil, let air reach the plant roots, allow for water drainage and generally make our plants healthier.



# HOME FOR AMERICAN WOODCOCK: ATTRACT BIRDS WITH THE RIGHT KIND OF COVER

Reprinted with permission, Kentucky Afield, summer 2011 issue

The American woodcock requires four distinct habitat types to survive and reproduce in Kentucky. The following habitat types need to be in relatively close proximity to each other for maximum benefit to woodcock:

1. Small clearings provide space for courtship where males can display and attract females in late winter and early spring.
2. Large clearings or fields are required for nighttime roosting.
3. Immature hardwood forests provide nesting and brood-rearing cover.
4. Dense areas of young hardwoods or shrubs provide woodcock feeding cover where the soil is moist and rich. These daytime feeding thickets also serve as important cover for migrating woodcock in the spring and fall. Without this cover, woodcock would be easy prey for predators.



Photo courtesy of Scott Freidhof

Of the four habitat types, daytime feeding cover is probably the most limited type on Kentucky's landscape. Dense thickets of trees and shrubs generally endure for about 20 years before forest succession or competition from trees shade them out of existence.

## BATS INSIDE: DO NOT DISTURB

Of Kentucky's 14 bat species, three are federally endangered: the Indiana bat, gray bat and Virginia big-eared bat. These rare bats hibernate in caves during winter from as early as September and generally until April.

Bats need to hibernate because insects, their food source, are scarce during winter. It is important not to disturb bats during hibernation because each arousal could cost an individual bat as much as two to three weeks' worth of energy reserves. Repeated disturbances can cause bats to die.

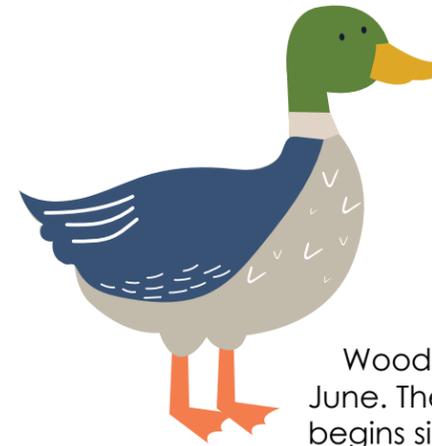
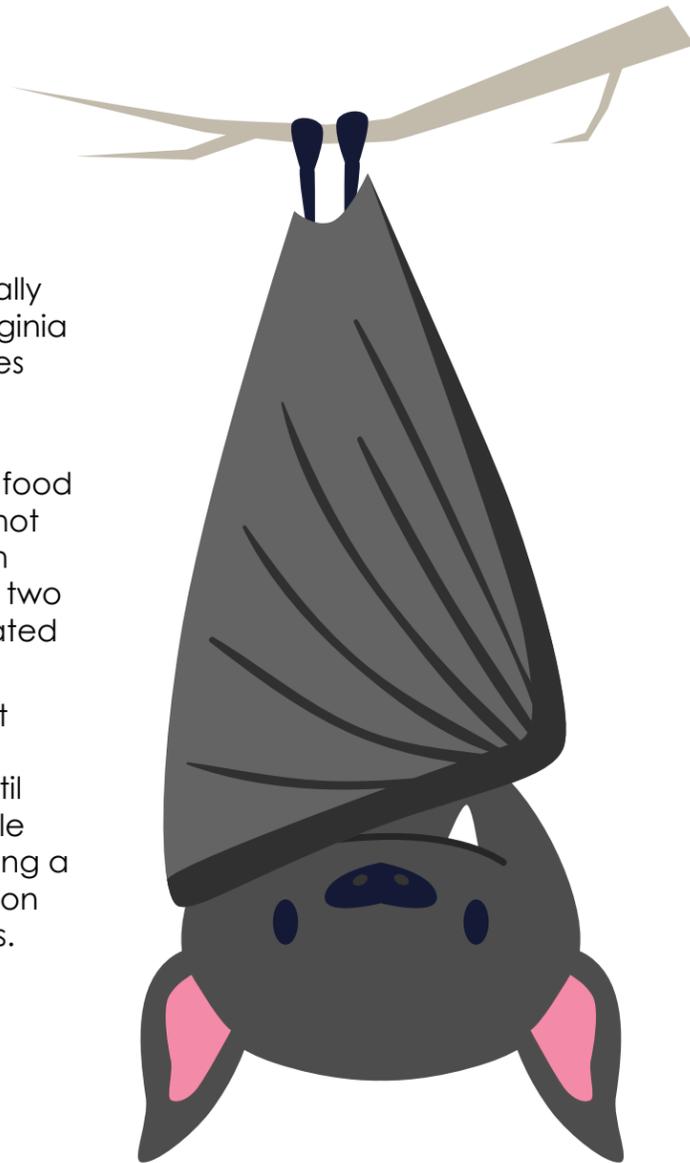
Some bats bear young in caves, forming what is called a maternity colony. Maternity colonies may begin forming in April and stay together until October, depending on the species. Most female bats give birth to only one pup per year. Disturbing a maternity colony may cause mothers to abandon young or drop flightless newborns to their deaths.



Photo courtesy of John MacGregor



Photo courtesy of John MacGregor



## WOOD DUCK BOXES: HELP NATURE BY CREATING YOUR OWN NESTS

Reprinted with permission, Kentucky Afield, spring 2007 issue

Wood ducks begin nesting in Kentucky from late February through June. The hen usually lays one egg a day, for a total of 10-12 eggs, and begins sitting on them after laying the last egg. Incubation lasts around 30 days.

Wood ducks need suitable cavities in which to nest. Without these cavities, they cannot nest even if other habitat conditions are excellent. Because the number of hollow trees is limited, building your own nest box can help a wood duck hen and her brood.

There are several designs for wood duck boxes that will work, but all boxes need to have certain features. You can build nest boxes out of 3/4-inch rough-cut cedar, oak, poplar, hemlock or cypress. You can also use plywood.

The wood should not be painted, stained or chemically treated. Use galvanized wood screws or nails to assemble the boxes to keep boards from pulling apart. The dimensions should be approximately 10 inches by 10 inches inside. The entrance hole should be a 3-inch by 4-inch oval. It is important to attach a piece of 1/4-inch hardware cloth below the entrance hole. Ducklings will use this as a ladder to exit the box. Otherwise, the young ducklings will die because they cannot get out of the box. Your box should include a door or lid to allow you to clean it and add nesting material, such as wood shavings, to the box.

Nest boxes can be erected in several ways. We recommend using a 4-by-4 inch post equipped with a predator guard. Mount boxes near wetlands, ponds, rivers, creeks, sloughs and other natural waterways that have emergent and overhanging vegetation, but do not erect boxes under tree limbs or near other objects that may allow predators such as raccoons or rat snakes to gain access to the nest. Mount the box 6- to 12-feet high, keeping in mind you will need to clean out the box each year.



# SAVE THE MONARCHS: HABITAT CAN HELP REVIVE THIS IMPORTANT POLLINATOR

Reprinted with permission, Kentucky Afield, summer 2017 issue

## 3,000 MILES

Contemplating the journey the Eastern North American monarch makes each fall – a trip that may last up to 3,000 miles - is one of the most awe-inspiring feats of the natural world. Just image those tiny, delicate wings carrying the monarchs on a journey that begins as far north as Canada all the way to their wintering grounds in Central Mexico.



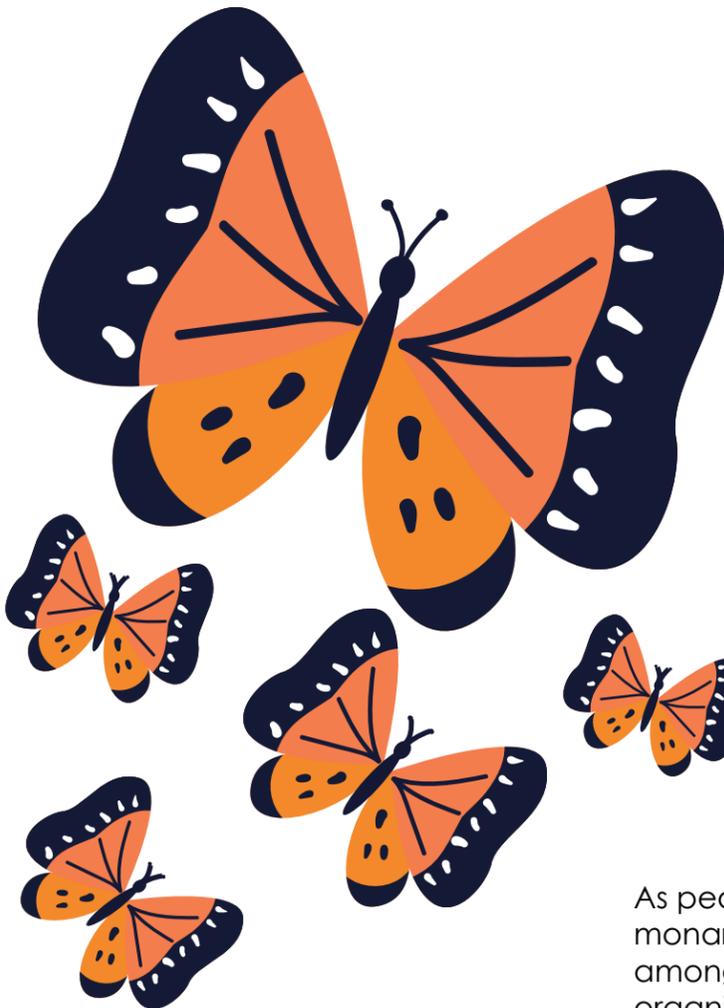
The length of the journey alone is astounding, but then consider that the generation making the arduous trip has never been there before. Researchers believe that the magnetic pull of the earth and the position of the sun, among other factors, help them find their overwintering site.



Aside from their beauty and intriguing natural history, monarch butterflies and other pollinators play a critical role in the production of our food. Insects comprise most of the 200,000 species that pollinate plants. Pollinators sustain plant species all over the world, including many of our most essential food crops. One in three bites of food and roughly three-quarters of all flowering plants trace directly back to the work of a pollinating species.



As people learn more about the plight of the monarch and other pollinators, a broad effort amongst citizens, government agencies, non-profit organizations and others has emerged to help this incredible butterfly species.



Monarch populations have declined drastically in the past 20 years. The causes include habitat loss, habitat fragmentation, pesticides and a changing climate, which has intensified weather events and affected monarch populations.

Restoring the landscape of the monarch's native range is critical to the survival of this species. One vital component of that restoration effort is establishing populations of native milkweed plants.

Milkweed plants are the only food source for larval monarchs. Monarch caterpillars feed on the milkweed's thick, gooey sap - which is poisonous to most vertebrates - making monarchs unpleasant to birds and other predators. Similarly, without nectar from flowers, these fall migratory monarch butterflies would be unable to make their long journey to overwintering grounds in Mexico. The need for host plants for larvae and energy sources for adults is key to their survival.



No matter who you are or where you live, if you want to help monarchs, you can get involved today. Start by planting milkweed and native nectar-producing plants. Do not use pesticides. Instead, garden organically to minimize your impacts on monarchs, their food plants and other pollinators.



# A VICTORY FOR HABITAT IMPROVEMENT:

## SHORT-EARED OWLS APPEAR AT PERRYVILLE BATTLEFIELD

Reprinted with permission, Kentucky Afield, spring 2017 issue

The Perryville Civil War battlefield in Boyle County received some unexpected visitors in February 2017: a group of short-eared owls. An ongoing habitat improvement project at the site helped make this possible.

The Friends of Perryville Battlefield, Kentucky State Parks, Natural Resources Conservation Service and Kentucky Department of Fish and Wildlife Resources have teamed up to plant 625 acres of native grass and wildflowers at the Perryville Battlefield State Historic Site. It is the single largest native grass establishment effort ever tackled by Kentucky Fish and Wildlife. The Perryville project sought to enhance the authenticity of the Civil War landscape – including the replacement of modern fescue with native grasses - while improving wildlife habitat.

These owls typically winter in southern states, including Kentucky. They spend their summers in the northern United States and Canada.

Kentucky Fish and Wildlife lists short-eared owls as a species of greatest conservation need. Wildlife on this list require special attention to ensure the protection of their populations.

Short-eared owls are beautiful creatures. They have black-rimmed yellow eyes, a pale facial disk and very small ear tufts. Unlike most owls, they hunt during the day. Their prey includes mice, voles and birds, hunted over open grasslands and marshes. Birders see them mostly around dawn and dusk.

Short-eared owls often form communal groups on the ground in grassy fields. They sometimes fly with northern harriers, as they have similar habitat and food requirements. Harriers resemble owls. However, harriers have a white rump patch and smaller head.



The fact that short-eared owls have chosen the fields of Perryville to hunt indicates that small mammals have increased due to the habitat changes. These fields were previously fescue, in which very few small mammals live.

Native grasses provide much-needed habitat for a variety of wildlife. White-tailed deer, turkey, quail, rabbits, grassland songbirds, small mammals and even owls benefit from native grass plantings. Biologists expect to see an increase in numbers for many of these species in the future.



Photo courtesy of Kate Slankard

# MYSTIQUE OF MIGRATION.

Reprinted with permission, Kentucky Afield, spring 2017 issue

Migration seems mysterious, almost magical. Gazing at gathering flocks passing overhead, we wonder about the birds' ultimate destination.

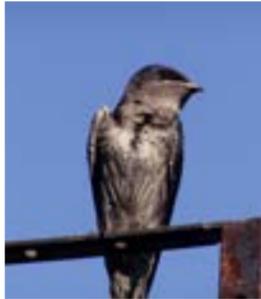
How can it be that most birds, traveling under the cover of darkness, are able to navigate their way to far away places by the position of the stars and moon -- or polarized light from the setting sun, the earth's magnetic field or wind direction? Some or all of these may play a part in nocturnal travels. Considering other elements, such as the availability of food before and during migration and severe weather conditions, it's a wonder the migrants are capable of surviving at all.

Neotropical songbirds that nest in Kentucky and winter in Mexico and Central and South America make these long journeys annually.



## BOBOLINK

Bobolinks make one of the longest of all migrations. These birds fly south of the equator to the tropical regions of South America and live in the grasslands east of the Andes Mountains in southwestern Brazil, Paraguay and Argentina.



## PURPLE MARTIN

Purple martins fly from the U.S. across the Gulf to the West Indies. Then they travel on to South America where they winter primarily in the Amazon Basin. Purple martins may also be found living in southern and eastern Brazil and northern Bolivia during winter.



## HOODED WARBLER

Many hooded warblers fly over the Gulf of Mexico to southern and eastern Mexico, wintering in the humid and semi-humid lowland forest and scrub of the Yucatan Peninsula. Fewer warblers spend winter in Bermuda, Cuba, Puerto Rico, the Virgin Islands, Guadeloupe and Martinique.



## RUBY-THROATED HUMMINGBIRD

Ruby-throated hummingbirds usually migrate along the Gulf Coast during winter travels, saving the Gulf crossing until the return trip in spring. These hummingbirds can be found wintering in the tropical deciduous forest of Jalisco, Mexico; the tall tropical dry forest near Palenque, Mexico; the citrus groves of central Belize; and along the edges, gaps and rivers in the lowlands of Costa Rica.

# START AN ENVIROTHON TEAM

Are you interested in environmental issues? If so, then you and your friends should form an Envirothon team. The statewide competition allows high school students to team up on a series of hands-on outdoor contests to solve environmental problems and test their knowledge of natural resources.

The event is made up of teams of five high school students competing in five different areas: aquatics, forestry, soils, wildlife and a current issue. The 2020 current issue is "Water Resources Management: Local Control and Local Solutions." At each site, students will use their knowledge to participate in hands-on activities to complete a test.

The Kentucky Envirothon consists of two regional competitions. Top scoring teams from each regional competition will move on to the state competition. Regional competitions are held each year in April, and the state competition is held in May. Registration for next year's competition will begin in December.



## CONTACT INFORMATION:

Your local conservation district:  
<https://eec.ky.gov/Natural-Resources/Conservation/Pages/Conservation-Districts.aspx>

Division of Conservation Envirothon:  
<https://eec.ky.gov/Natural-Resources/Conservation/Pages/Envirothon.aspx>

Johnna McHugh: 502-782-6703 or [johnna.mchugh@ky.gov](mailto:johnna.mchugh@ky.gov)

# THINGS THAT FLY

2019 Conservation Writing and Jim Claypool Art Contest | Rules

STATE WINNERS: First: \$250; Second: \$150; Third: \$50

REGIONAL WINNERS: \$50

COUNTY LEVEL WINNERS: \$25

\* State/Regional winners will receive a personalized certificate. County winners that win regional or state awards will only receive one check for the top prize.

## RULES

1. Kentucky students grades 6-12 are eligible to compete in the writing contest. Students up to grade 5 may compete in the art contest.
2. A student may not enter both the art contest and the writing contest during the same contest.
3. An entry must be created by one and only one student. Any entry submitted by more than one student will be disqualified.
4. All entries become the property of the contest sponsors. The decisions of the judges at all levels of competition are final.
5. Top three writing entries and/or artworks from your school must be submitted to your local county conservation district by Dec. 1, 2019.
6. The entry form below must be completed and secured to the back of your entry.

Artwork: Student entries shall be 8 1/2" X 11". Entries may be submitted on any color or thickness of art board (poster board, mat board, etc.) or may be on art paper, which is firmly affixed to art board. All artwork must be two-dimensional (2-D). Three-dimensional (3-D) artwork will not be accepted. Artwork may be rendered in any medium: pencil, ink, charcoal, pastel, crayon, paint, photography, etc. Mixed media and collage work is acceptable as long as all pieces are securely glued to the surface of the work. Entries should not be laminated. All entries must convey at a glance the theme of the competition to persuade the viewer to take action toward good wildlife conservation practices. All entries must be the original work of the student.

Writing: Entry may not exceed 1,000 words printed single sided. No photographs or artwork may be included with the written work. It is suggested that the written entry take the form of persuasive or informative/explanatory. Students should write from the perspective of an informed writer to a less informed reader and may be in the form of a letter, article, editorial or speech. It should persuade the reader to take action toward good wildlife conservation practices. The work should be from the student author and avoid plagiarism from this source or other sources. Sources should be cited. Do not use the Conservation Writing and Jim Claypool Art tabloid as your only source.

## POINT SYSTEM FOR ART

- 50 points: Purpose/Audience (appropriate communicate style, establishes and maintains a purpose, hold to subject in community, theme is clearly conveyed)
- 30 points: Composition/Creativity/Craftsmanship (layout, originality, and quality of work, such as neatness)
- 20 points: Language/Correctness (word choice, usage, spelling, punctuation, capitalization)

## POINT SYSTEM FOR WRITING

- 30 points: Purpose/Audience (establishes and maintains a purpose, communicates with audience, employs a suitable tone)
- 20 points: Organization (logical order, coherence, transition organizational signals)
- 20 points: Idea Development/Support and Evidence of Research (student's original work shows sources of research)
- 30 points: Language/Correctness/Sentences (word choice, usage, spelling, punctuation, capitalization, sentences varied in structure and length and constructed effectively)

### Conservation Writing and Jim Claypool Art Contest Entry

Student Name (Miss, Mr) \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ Zip \_\_\_\_\_

Home Phone ( ) \_\_\_\_\_

Age \_\_\_\_ Grade \_\_\_\_ Teacher \_\_\_\_\_

County \_\_\_\_\_

School \_\_\_\_\_

School Phone ( ) \_\_\_\_\_

Parent(s) Name \_\_\_\_\_

I hereby certify that I have read the rules and this entry is the original work of:

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Parent/Guardian Signature (required)

\_\_\_\_\_  
Teacher or Principal's Signature (required)

