KENNEY RIDGE COMMUNITY ASSOCIATION

Surviving Nature Logs

Written by Suzie Lindsay

1998 August

2000 March

2000 May

2000 June

2000 September (2)

2000 October

2003 January

2003 February

2003 April

2003 May

2003 August

2003 September

2005 January

2005 February

KENNEY RIDGE NATURE LOG
(AUGUST, 1998)

What Is It?

The Kenney Ridge Nature Log is a monthly newsletter intended to help us all understand and appreciate that workings of the natural world on Kenney Ridge. Mike Conroy named it; we'll try to make it everyone's work, by reporting what we all find on the ridge. Suzanne Lindsay is the initial recorder and/ or author, but contributions from all of you are welcome and needed (call 549-5350 or e-mail <_____>). This first issue looks at what's likely to happen on the Ridge in August. A few scientific names are sprinkled into the text, but don't be alarmed -- they're intended mostly to help you check descriptions in field guides.

A Month of Subtle Transitions

August marks the peak of summer in Athens, but the season is past its prime. The longest day of 1998, June 21, offered a potential 14 hours, 25 minutes of sunshine. Halfway to fall, the days are drawing in. By the 31st of August, the sun will rise at 6:06 a.m. and set at 7:01 p.m. (Eastern Standard Time), allowing 12 hours, 55 minutes of sunlight. Even though the weather seems hotter than ever, the shorter days and longer nights bring gradual changes, since many living things are adapted to the seasonal balance of light and dark. This spring, lengthening days spurred (in ways not entirely understood) some birds to migrate northward and most to breed. Rabbits, mice, and squirrels produced new litters, and tiny fawns trailed deer. Now, the turning year brings new patterns.

On Kenney Ridge,the blooms of spring's "short day" (or "long night") plants --dogwood, wild azalea, wild geraniums, dandelions, violets, false strawberries, Chickasaw plum (a shrub) and the yellow and orange cups of the tulip tree -- are long gone. By August, the plants of early summer also are passing. A few late stragglers remain in the meadow and open lots, but the lacy white Queen Anne's Lace, the small, white-to-lavender flowers of daisy fleabane (Erigeron), the tall yellow and green spires of mullein, and the single golden head of false dandelion (Krigia) are almost gone. Thistles have gone to seed, providing seeds and

nesting material for small birds.

Despite the profound drought that is withering plants and trees this year, a second group of "short day" plants gradually will appear as fall approaches. In the meadow and along the roadside, the most conspicuous plant in early August is the tall, vividly green plume of dog fennel (Eupatorium compositifolium), which will bear thousands of tiny white flowers in a few weeks. Next to the farmhouse porch, pokeweed's purple stems are just as eye-catching; its loose sprays of small, white flowers develop deep purple berries from the bottom up. Take care: the mature leaves, stems, and berries are poisonous, despite the plant's use as a spring salad. In dry places, the gray-green stems and flowers of Rabbit Tobacco (Gnaphalium) are increasingly visible. Near Three Oaks Commons, the small yellow flowers of Camphorweed (Heterotheca subaxillaris) are borne on open, rather straggly branches.

As the month advances, several kinds of goldenrod and sunflowers should appear. The yellow-rayed flowers of bitterweed and sneezeweed (both species of Helenium) will be common. Flat, white flower heads of elderberry shrubs gradually will become loose clusters of wine-colored berries, and the comma-shaped fruits of staghorn sumac will darken to a deep crimson. In the woods, blueberries (Vaccinium) will mature, and golden to orange jewelweed will linger in damp places. The more shade-tolerant sunflowers will bloom here, along with the ragged white flowers of the wood aster. Sourwood, one of the last trees to bloom (associated by most Southerners with a delicious honey), will drape its graceful white sprays along the forest's edges. In the woods, notice also how dark green the leaves have become, and how many show signs of insect predation. Rolled and tattered leaves are signs of small, active, usually hungry inhabitants. By the end of the month, many young animals will be independent and some (especially rodents) already will have littters of their own. Young deer will be loosing their white spots. Nestlings will be on their own, and the first migratory birds of fall soon will pass through.

Using Other Senses

The sounds and smells of August on Kenney Ridge have their own flavor. Large numbers of periodic locusts (cicadas) emerged this summer. Their mechanical buzzing filled the woods at noonday and well into the evening but now is dying away. These insects spend most of their 13- to 17-year lives undergound; as they near maturity, the larvae develop into two inch long, shiny brown insects that crawl up tree trunks and begin to make their mating calls. Their prominent red-brown eyes gleam; their stiff wings seem to be cut from clear cellophane. Soon after they mate and lay their eggs, the adults die. Well into the fall, their dried brown bodies cling to tree trunks and litter the ground.

Still singing in the evening woods are the katydid and other leaf-like insects that are hard to see, but whose voices mean summer for most Georgians. The buzz of bees and flies changes into the whine of mosquitos at dusk, especially near streams and damp woods that still offer breeding places. The cooing of mourning doves, the harsh shrieks of blue jays, and the imitative trills of mockingbirds are familiar parts of the summer. If you are lucky enough to see a hummingbird pause to feed on the deep orange flowers of trumpet vine, you may hear the faint buzz of rapidly moving wings and sometimes a tiny, high-pitched squeak.

The smells of summer are those of dust-dry, sun -baked earth and acrid sneezeweed, the fruity scents of late blackberries and domestic peaches, apples, and pears (a few still grow on the old trees behind the farmhouse; look quickly, before the wild critters find them), and the wonderful nose-prickling odor of the woods and fields after a summer thunderstorm. For touch, stroke the fuzzy leaves of mullein, smooth a dog fennel plume across your cheek, or gingerly test the prickles of thistles.

Sky Sights

August is famous for the spectacular night show put on by the Perseids, brilliant meteors that streak the late night sky each year. Visible from July 23-August 23, the showers will peak on August 10-12, too

close to the full moon of August 7 for the best viewing. For the best views, look about 45 degrees above the horizon, away from house lights and city skyshine. Binoculars set to infinity will help. One sighting will demonstrate why avoiding "light pollution" at Kenney Ridge has real benefits.

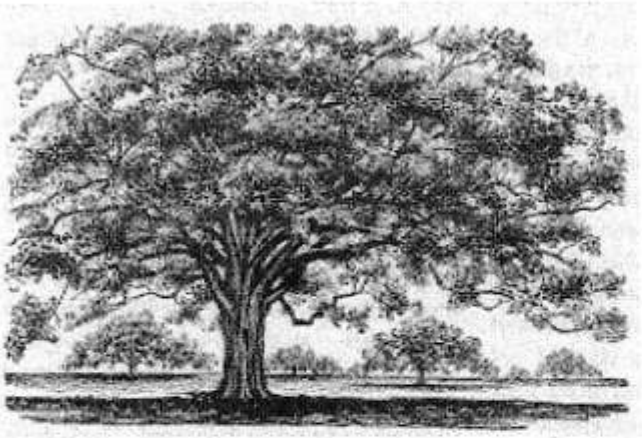
Framing Nature

Without a sketchbook or camera, you can "frame " Kenney Ridge's vistas. Form a rectangle by placing the index finger of each hand to the thumb of the other, twisting one wrist toward you and the other away. Sight through your fingers to set apart one bit of the landscape. Take a closeup of small things by pinching the tips of your thumbs and index fingers together and looking through the tiny gap.

For some late-summer art, try gathering a few berries and leaves and smearing their juices onto paper to "paint" a picture. Test your senses by seeing how many summer sounds, smells, or shades of green you can identify within a minute. Bet the children will beat the grownups!

Finding Out More

The Audubon and Peterson Field Guide series offer detailed looks at Eastern birds, flowers, ferns, reptiles and amphibians, mammals, and many other groups. For children, Eyewitness books and videos are easy introductions; Peterson First Guides also can help. These books are available at most of the larger bookstores in Athens and Atlanta.



KENNEY RIDGE NATURE LOG

October 2000

Views of autumn are as varied as the observer. For Japanese writers of haiku, autumn is strongly associated with melancholy and sadness, as the season drifts toward the bleakness of winter. For John Keats, it was the "season of autumn mists and mellow fruitfulness". Kenney Ridge shows all these aspects, but also the glory of red and golden leaves that releases the landscape from the almost smothering greens of summer.

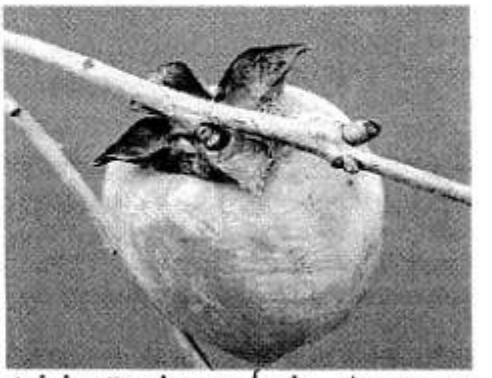
Already there are bare branches, stripped of the leaves that so suddenly, in mid-October, assumed their fall colors. One sharp freeze was enough to accelerate the season. What moisture is left in the foliage of hardwood trees and deciduous shrubs is ebbing toward their roots. Their leaves' deep green chlorophyll has broken down, and now the pigments of yellow-to orange carotenes and red-to-purple xanthophylls are showing through. When these in turn break down, the leaves brown. In the meantime, an abscission layer (cleavage point) has formed at the base of each leaf's stem, and the gentlest movement or even the weight of the leaf itself is enough to detach it. A sharper breeze sends showers of stained-glass colors rattling down into the deep blue silence of the October skies.

When rain comes again and most of the trees are bare, melancholy may rule, but for now, crisp mornings bring Keats' mists. A pale sun glows through luminescent vapor. If you're out at dawn and lucky, you may hear the sonorous call of a great horned owl from the woods behind the MacNair's house, as Liz Conroy did recently. As the sun grows stronger, the quiet mystery of the ground fog fades away, all the insubstantial wraiths of plant and tree are replaced by solid shapes, and the owl returns to his rest.

There's a surprising amount of "mellow fruitfulness" about, in spite of harsh drought. Walk down the old road next to the Community Garden, and you'll easily find six or seven trees and shrubs bearing fruits. The oriental angularity of leafless persimmon branches contrasts with the tempting orange globes that hang below them. Persimmons are the favorites of opossums, raccoons, and any other scavenger that comes upon them in the grass. Laura Conroy likes to eat them, too, but cautions that the fruit must be completely ripe (soft, with wrinkled skin, and a deep shade of orange-rose) before you try. Unripe fruits are a brighter orange, hard, and loaded with tannins near the skin, which give them a very bitter, puckery taste. Peel the fruit, which is heavy with dark brown, oval seeds. Wild animals spread the tree by excreting its undigested seeds — watch carefully, and you may find evidence of where a tree could sprout next spring.

Trumpet-Creeper vine pods near garden

Further along the fence line, the hard yellow marbles of the chinaberry hang gracefully below the trees' green-gold, dissected leaves. Growing nearby are honey locusts (*Gleditsia triacanthos*), bearing sharp spines on their branches and strap-shaped, mahogany brown fruits that dominate the skyline. When the fruits fall, animals will gnaw them for the sweet pulp and bean-like seeds within. The neighboring eastern red cedars (*Juniperus virginiana*) bear small blue-purple berries that are strongly aromatic when crushed, and a favorite meal for some birds. At intervals stand thickets of an unwelcome invader, privet bushes, which owe their unchecked spread to the birds that eat their small, hard, dark-purple seeds. According to the *Athens Daily News* of October 18, 2000, most of the privet hedges in the south originated from ten "mother" plants imported from France by Jules Berckman, a nurseryman and garden designer who lived in Augusta. Gardeners may praise him, but lovers of natural woodlands and fields often wish he had not been so successful!

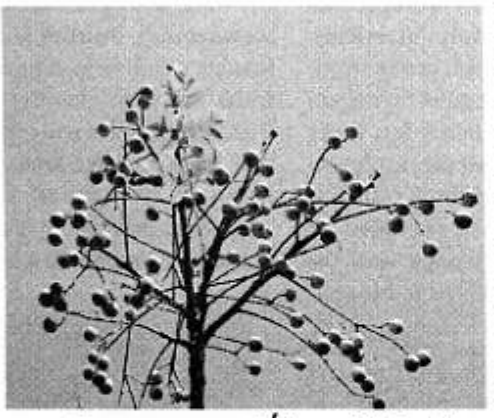


A juicy Persimmon fruit (Photos Oct. 29)

Another wildling along the road is a cherry tree that bears small, inedible, green-brown fruit. Even the vines that twine up fences and trees are in fruit: The long, curved, brown pods of the trumpet vine are splitting open to release their seeds, and bunches of shiny black berries hang below smilax vines. Young pecan trees nearby are not bearing this year, either because they have not reached maturity or because of drought. Similarly, the acorn crop from Kenney Ridge's many species of oaks is much smaller than last fall, forecasting a harder winter for acorn eaters.

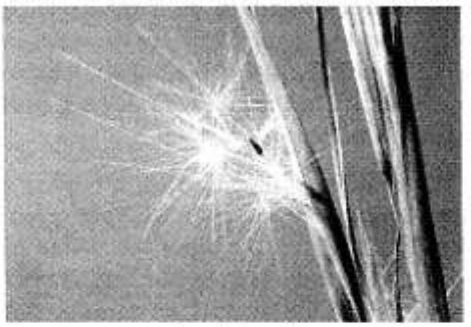
Most herbaceous plants have gone to seed. The roadsides and meadows are flecked with the white fluff of broomsedge, the soft gray down of eupatorium, and the tan half-spheres of camphorweed. A small (12-15 inch) spe-

cies of goldenrod makes a handsome yellow accent among the maturing grasses. A taller, earlier blooming species is more noticeable along Three Oaks Drive, but is beginning to go to seed. The stiffly angled stems of lespedeza, an imported plant that has spread widely from its use as a ground cover for newly graded land, are brown, its pale lavender flowers long since faded. Pull a branch through your fingers. The clasping leaves will release easily, and small, oval, dark brown or black seeds will appear in your hand. The seeds are food for many birds, including the covey of bobwhite quail (a mother and six identical fat babies) Liz Conroy flushed early one morning near the Lindsays' house.



1. Can you name this exotic tree?
(Answer at bottom)

October's wildlife is abundant, although the deer have largely disappeared during daylight. Skipper StipeMaas glanced through a window one day and found two downy woodpeckers right outside. William Kissane also has been watching birds, and saw chickadees (probably the Carolina chickadee) and a hermit thrush,



Broomsedge (a native grass)

which winters in the southeastern states after breeding in New England and Canada. The Kissanes also found a toad in their front yard. It was brownish-gray with darker gray markings on its back and a white belly, and about three inches long. When William held it, it struggled to get away. As impressive as it was, the toad was still smaller than others William has seen near the river.

Laura Conroy has been investigating more insects. She identifies one of the autumn butterflies fluttering about the meadows and open places as the buckeye (*Precis coenia*), which is relatively small (wingspan 2 1/8 - 2 1/2 inches) and has light olive-brown upper wings marked by two vertical orange stripes, plus three eyespots and orange and yellow margins on its lower wings. A second, the common sulphur (*Pieris* sp.), has yellow wings with dark brown margins. The common sulphur's upper wings each have a small dark spot; its lower wings have a barely visible orange spot. Laura suggests tiptoeing up to these butterflies because each

Gardeners may praise him, but lovers of natural woodlands and fields often wish he had not been so successful!

departs quickly when you come close. The pale to bright yellow wings characteristic of insects in the Pieridae family, which is common in Europe, may have given all similar wide-winged insects their common name of "butterflies".

Valley StipeMaas and her entire class at Waseca were charmed by another black and yellow butterfly that Valley found one crisp morning. The butterfly began to warm up in the StipeMaas' car and at Waseca, fluttered all over the room. When the children opened a window on the cold, windy side of the building, the insect would not fly out. They finally carried it into a sheltered, sunny spot outdoors, where it perched on Valley's finger before taking flight.

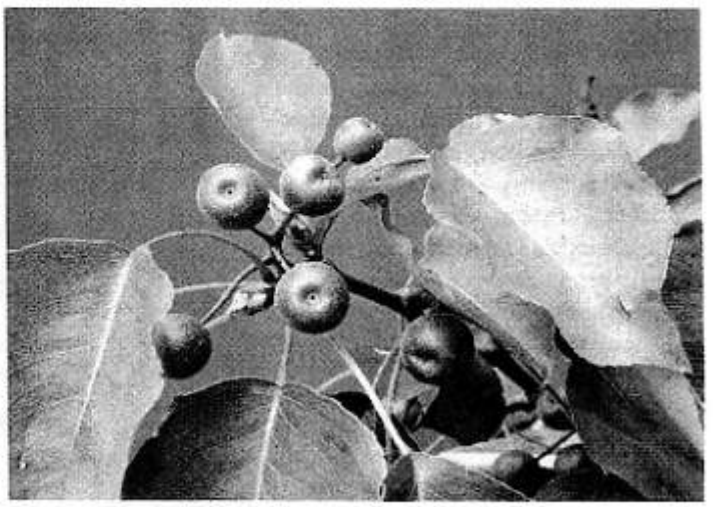
The autumn days and evenings still resound to the rasping of katydids, which prefer open woods and meadows. One Laura found beneath her porch and captured for closer study was bright green, with yellow stripes on each side of its fused head and thorax (cephalothorax). She identified it as a female angular-winged katydid (*Microcentum retinerve*), which is found from Ontario and Massachusetts to North Georgia and west to Arkansas. The species eats the foliage of trees and shrubs, especially oak, willow, cottonwood, and citrus trees. Laura put oak leaves in her insect box by chance, and the katydid seemed quite at home. As Laura watched, she carefully cleaned each of her feet and her ovipositor, perhaps in preparation for laying her oval gray eggs. The eggs will overwinter on a fallen leaf and hatch next spring.

Although autumn officially will last until December 21, the crescendo of color will soon mute into darker reds, browns, and tans. Given wind or rain, many hardwood leaves will fall, and the Rapunzel's hair of golden grapevines flung over shrubs and hung from branches will turn back into gray-brown strands. Go now, look well, and enjoy this "mellow fruitfulness"!

Text: Suzanne A. Lindsay

Photography and Layout: Jennie Alvernaz and Bill Sheehan

October 25, 2000



2. Can you name this exotic tree?
(Answer at left)

ANSWERS: 1. Chinaberry (*Melia azedarach*) 2. Bradford Pear (*Prunus* sp.) Both trees are found along the fencerow behind the community garden.

Kenney Ridge Nature Log
March, 2000

Spring's here officially , but it came unheralded two weeks before the vernal equinox (March 20), the day when the sun rises and sets exactly twelve hours later. Given the early start, March has been the month of birds and blossoms.

Bird watchers are busy , as the great spring migrations of songbirds pass through fields and woods. Some of the migrants will choose to stay here; many more will go on to nesting grounds farther north. The Kissanes and the Conroys, who are feeding year-round, both report sightings of robins, cardinals, blue jays, brown thrashers, black-capped chickadees, mourning doves, chipping sparrows, crows, tufted titmice, and juncoes. Laura Conroy, who looks and marvels daily, reports an especially large blue jay named "Sammy". She also has seen towhees, Carolina chickadees, white-throated sparrows, house finches, and territorial fights among four male mockingbirds over a large cedar tree near the Goggins' line.

One of Laura's sightings the brown-headed cowbird, shows near-parasitic behavior.. These birds may have been attracted by droppings from the Goggins' horses, since they specialize in following cows and other large ruminants in search of partially-digested food. Cowbirds are unwelcome to song-bird lovers, since they find nests in which eggs have been laid and add one of their own. Brooded unawares by the songbird, the quickly-developing chick hatches before or simultaneously with the bird's own offspring. The large, aggressive cowbird chick out-squawks the others and receives a disproportionate share of food. Cowbird chicks also have been filmed pushing the other eggs and/or chicks out of the nest. The foster parents apparently do not realize their loss; without competition, the cowbird thrives, fledges, and is off to repeat the cycle.

The Kissanes are feeding thistle seed and have attracted from two to eight goldfinches at a time. The males, Jim reports, are now "putting on their yellow jackets", as they come into their breeding period. Nan has sighted bluebirds at their water source; Dan Everett and the Lindsays have seen them elsewhere. Tom Edwards saw several species of warbler early in the month.

Soaring above the Big Meadow a redtail hawk has been screaming its challenge; and turkey vultures make their silent circles. Crows, several apparently mated, slash black lines against blue sky and investigate everything that moves and much that doesn't. They have several different calls: "Intruder!", "I've found it!" and "Come along now" seem to describe some of their vocalizations and behavior.

Early in the month , a woodcock appeared, strutting along the main road near the Blane-Everett driveway. The Conroys observed the male hunching its shoulders and dancing a curious little hop, apparently displaying to a female in the tall grass beyond the road. Mike Conroy saw and heard the predawn flight of the bird and its call, a shrill "peent, peent" followed by a dive downward, repeated many times., Suzie Lindsay flushed the distinctive "rotund' (Petersen's description), long-billed bird near the cul-de-sac; its flight is noisy and its camouflage against the trees excellent. The woodcock may have nested. No one is sure, but it hasn't been sighted recently. Nancy Hunter found a haphazard nest with nineteen large eggs that appeared to be those of a chicken, just off the trail at the southern edge of the Big Meadow. The nest had been deserted and the eggs were cold, well before the meadow was mowed. Predators later disposed of the eggs.

Still to come: hummingbirds, indigo buntings, wood thrushes, yellow-rumped and myrtle warblers, all were sighted in early April last year. For identifications, Peterson's "Field Guide to Birds of the Eastern United States" is the standard. The Conroys also recommend the more limited "Backyard Bird Guide" for its easy keys and clear illustrations.

Night sounds abound At the StipeMaas' pond, the persistent chorus of the tiny tree frog, Hyla crucifer (named for the X-shaped marking on its back), is almost

deafening. On warm nights, crickets are singing again. Screech owls and the "Who calls for me?" owl have been signaling in the darkness. On the evening of the 23rd, the Lindsays heard the first whippoorwill of the season.

Blossoms and the first new leaves form the other theme of this warm March. By the first week of the month, daffodils, bridal wreath, and forsythia were in full bloom by the Farmhouse. A fragile white lace of unfolding blossoms hung on thickets of Chickasaw plum on Three Oaks Common and the Big Meadow . The plums were only the first of the shrubs and trees that bloom before their leaves emerge. As the month continued, redbud trees (Cercis canadensis) flung magenta-pink branches against gray days and soft blue skies alike; and tight yellow bunches of tiny yellow flowers tipped the limbs of sassafras trees (look for one on the northern edge of the Big Meadow). In this last week of March, scattered shrubs of hawthorn (Cretaegus sp) stand vividly white along the southern edge of the Big Meadow and on lots fronting Three Oaks Drive. Two frosty nights in the middle of the month scattered ice crystals across the grass and thinned the plum blossoms; even as they turned brown, the larger, less profuse bloom of the hawthorn began. To distinguish between the two, took for the taller, stouter, single trunks of the hawthorn, and reach carefully past the sharp thorns that spike its branches to examine the five-petalled, 3/4 inch blooms.

Trees are blooming, too. Maples and elms were first, and now are in seed. Now male tassels (the children's "woolly worms") and tiny female flowers hang on the oaks, even as the last shreds of last year's leaves drift down. Coming soon are the leaves and then the flowers of sweet gum (Liquidamber stryraciflua), beech, sycamore (watch the two on the corner of the Blane-Everett yard) and last of all, pecan and black walnut. These two species hang their bright green tassels much later than other species, and follow them with tight bundles of compound leaves(small leaflets arranged along a single stem) that unfold quickly. In contrast, the graceful, symmetric tulip poplar's (Liriodendron) leaves are fully expanded before their yellow and orange cups appear.

Closer to the ground understory shrubs such as the buckeye are in leaf (five leaflets arranged in a palmate, or hand-shaped , pattern) and starting to send up their spires of creamy-yellow blooms . Look for these in the Sweat-Giese woods at the cul-de-sac, and along the lower stretch of the Lindsays' easement. Blueberry bushes (Vaccinium sp.) are leafing out. The brilliant yellow, trumpet-shaped blooms and glossy dark-green leaves of the Carolina jasmine adorn tree tops and limbs. The distinctive flowers of the dogwood are expanding. Their four white "petals" are actually the bud's enfolding sepals, and the flowers themselves are small and tightly bunched in the middle of each bloom.

In the newly-mown meadow, tiny blue and yellow-throated "Johnny Jump-ups" (a member of the viola family) and the shiny yellow, five petalled Potentilla (no common name) hug the ground along the trails. In shadier places, mosses are sending up their delicate yellow-green spore cases on needle-like stalks. The grasses are growing vigorously; the blackberries are almost in full leaf, and will begin to bloom soon.

Keeping a nature diary, with the date, place and sighting of plants, birds, and other animals is a good way to bring the seasonal round into focus, and will provide valuable records for the future. It can be an individual or family project. The Kissanes use a "Guest Book" that was a housewarming gift. Try hunting for ten different shades of green or have a treasure hunt for kinds of flowers. Knowing their exact names is interesting and rewarding, but not as important as the love and appreciation Kenney Ridgers bring to the search.

Suzanne A. Lindsay
March 24, 2000

Kenney Ridge Nature Log
May, 2000

Summer will be here before spring is officially over, given drought and relatively high temperatures. Many wildflowers are blooming and setting seed well ahead of their usual times, and there are other signs of the season as well.

According to Joe Rao writing in the June, 2000 volume of Natural History, magazine, the summer solstice (from the Latin for sun (sol) and standing still (sistere) is the point at which the earth achieves its greatest tilt toward the sun and seems, at noon, to pause or stand still. In the northern hemisphere, at the Tropic of Cancer, this will be on June 20 at 9.48 p.m., Eastern Daylight time. This day does not necessarily have the latest sunset of the year, since for several days afterwards the sun will set at successively later times. The actual period of daylight will begin to shorten on June 14, however, since the sun will begin to rise later even though it is setting later for a time. As we move toward the Fall Equinox, the days will shorten steadily, if almost imperceptibly.

Meanwhile, plants that are adapted to days of increasing length are achieving or past their full bloom, urged on by warmth and drought. Among flowers, a native thistle, relatively short with red, brush-like blooms, has matured. Look for its puffy, pale tan-to-white seedheads beside the trail along the south edge of the meadow, and just to the left of the MacNairs' driveway. The aliens are here in full force: the nodding thistle, Carduus nutans (not, as identified in the May Nature Log, the native C. horridulum, which has yellow flowers), is even more apparent than in early May. Its large, extraordinarily spiny leaves shoot up tall stems bearing nodding, rose-purple flowers, "surrounded by broad, pointed, purple bracts, the outer ones curving outward"(National Audubon Society, Field Guide to Wildflowers, Eastern Region, p.370), that will produce hundreds of seeds. Incidentally, the Kissanes and Kate Blane report that the goldfinches that were so plentiful earlier this spring are no longer appearing at their feeders. These beautiful birds, which eat thistle seeds and use the down to line their nests, have gone on to their breeding grounds in northern Maine, the northernmost High Plains states, and southern Canada.

Among other wildflowers, a ragwort, Senecio smallii, that spread its flat-topped clusters of golden, aster -like flowers across the meadows is now going to seed. Look along the shadier margins of the meadows for the few remaining blossoms. Another brilliant addition to spring, the magenta Verbena rigida, is up to the topmost flowers on its inch-long, cylindrical flower head. This species has spread extensively on the meadow and along roadsides during the last two years, perhaps because our annual mowing is keeping down its competition. In damper spots, especially the roadside ditches, ox-eye daisies (Chrysanthemum leucantheum) are holding on but maturing rapidly. So is the false dandelion (Krigia sp.), which raises dandelion-like heads atop a smooth, forking stem above a rosette of basal leaves. A third yellow flower, a tickseed (Coreopsis sp.), has volunteered on the right side of the main road below and opposite the StipeMaas' driveway; a second clump, apparently introduced by Manita when she transplanted other wildflowers, is past its peak by the Deans' driveway, .

Blackberries are setting fruit ; humans and the many small mammals and birds that consume the berries will compete to harvest the crop. Patches of cactus (Opuntia humifusa) along the southern edge of the meadow are opening their brilliant yellow blooms during the daytime and will bear edible fruit. Bumblebees are actively

pollinating the plants as they crawl inside to reach the nectar. The Chickasaw plum thickets are heavy with green fruit. Persimmon fruits also are expanding; look for the remnants of flowers atop single, pale green fruits under the tree's alternate, glossy-green, smooth-edged leaves. Check along the Goggins' fence line near the garden.

As we move into June look for these wildflowers: Queen Anne's lace (Daucus carota, a beautiful alien), fleabane (Erigeron sp.) and the alien field garlic (Allium vineale) on roadsides and in meadows.

Kenney Ridge gardeners are trying to stay ahead of native plants that rejoice in freshly turned soil and full sunlight. Especially vigorous is the sickle-pod senna (Cassia tora), which, if left alone, in July would bear rounded yellow petals on two-foot stems. Other targets for hoeing are sprouts of blackberries growing from underground roots fragmented during plowing, and the prickly horse nettle (Solanum carolinense), which elsewhere is bearing pale lavender trumpets with prominent yellow, elongated anthers that form a central cone. Warning: this is one of the deadly nightshade family and all parts of the plant are poisonous.

Horse nettle reminds us that there are dangers at Kenney Ridge despite its peaceful appearance. Other poisonous plants include Datura, or jimson weed, plants of which are growing among the topsoil hummocks near the garden. Along margins and in the woods, poison ivy (Rhus radicans)spreads its smooth, green, lobed three leaflets in upright or trailing shrubs and sends hairy vines up trees. All parts of the plant, including roots, can produce an allergic dermatitis. In August, birds will spread the plant by eating the berries that form from clusters of small, yellowish-white blooms during May through July. Be sure you can recognize this plant!

Another danger lies underfoot In mid-May, a Southern copperhead snake (Agkistrodon contortix contortix) was run over near the StipeMaas' driveway. They suspect that the snakes are living among the erosion-controlling rocks that slope down to a culvert on the right side of the road. The two- to three-foot snake has a coppery-red head and pale pink-tan hourglass markings across its back, set apart by narrow darker markings. The underside is cloudy gray-white, with darker individual scales. It prefers lowlands and stream margins, so avoid damp, thickly vegetated slopes and hollows. Remember also that a traveling copperhead is well disguised against a background of dead leaves or grassy red clay banks.

Good general rules for dealing with snakes: never enter thickets or areas where you cannot see the ground beneath your feet. Never attempt to pick up or poke at a snake you discover. Copperheads curve into an S-shape and then strike very rapidly. Their lunge forward is much longer than their size would indicate. Be sure children know what copperheads look like and are warned not to let curiosity get the better of discretion if they encounter snakes. Show them pictures of timber rattlesnakes (Crotalus horridus) also; these snakes have not been sighted at Kenney Ridge, but we are well within their range. Even non-poisonous snakes, such as the lithe, beautiful king snakes that have been sighted several times along roadsides, in the meadows, or sliding into woods, can inflict a painful bite. Remember the rule: stay away and stay safe! Be grateful, also: snakes help to keep populations of rodents, chipmunks, and other small mammals in check.

Insects to watch forinclude yellow jackets, scorpions (see below), and the ever-present fire ants.

Meanwhile, in Kenney Ridge woods, the understory (area under forest trees filled with herbaceous plants,shrubs, and small trees) is changing rapidly. Most plants are in full

leaf. Members of the blueberry (Vaccinium sp.) and sparkleberry families soon will form fruits. The long-lipped, trumpet-like flowers of the ubiquitous alien, Japanese honeysuckle (Lonicera japonica), are just about gone. Their black berries, which birds relish and spread, to the dismay of those who prefer native species, soon will develop.

Spring plants of the forest floor have finished blooming, so the uniform color is shades of green. Look for unobtrusive but beautiful variations in the color and shapes of shrubs and ground covers, especially along the stream in the Seventeen-Acre wood. Mosses and lichens add accents of yellow- green or green-gray. If enough rain falls, mushrooms will appear overnight. Right now, bracket fungi growing on fallen logs and snags are the most visible.

In woods and fields, insects are busy constructing leafy homes. Look for the work of leafrollers, which stitch together the edges of leaves to form tubes in which caterpillars can pupate or eggs mature. Along the northern margin of the Big Meadow, the tops of a small, silvery gray plant have been neatly curled over and glued into a protective clump by some unidentified insect. Near windows and outside night lights, look after dark for lacewings, a wide assortment of moths, and noisily bumbling beetles.

Kenney Ridgers are reporting many adventures with wildlife/

-The Blane-Everetts, Conroys, and Hunter-Edwards each have birds literally at home.. Laura Conroy is observing the movements of a small brown bird (unidentified so far) nesting on top of a porch pillar, and also freed an eastern phoebe (Sayornis phoebe) that had flown into a screened porch. Kate Blane is keeping watch over a nest on her front porch. inhabited by a slightly-crested gray bird that may be an eastern pewee (Contopusvirens), a flycatcher that frequents orchards and woodland margins and groves. She also reports that cardinals are nesting in their apple tree. Tom Edwards regrets the loss of a nest built by a cardinal in pine tree just beyond their deck railing. One egg had hatched, but the female was still doggedly brooding another. One morning, Tom found the nest partially destroyed, perhaps by a raccoon or domestic cat, and all its inhabitants gone.

- Fiona Sheehan's cat brought her an injured baby rabbit, which was released but probably did not survive. The Conroys' dog, Hally, nosed out a nest of brush rabbits under a pine tree in their front yard. The nest was a simple scrape between roots, camouflaged by pine straw, grass, and twigs, and lined with the mother rabbit's fur. Although Laura carefully restored this and two other young rabbits to the nest, using gloves to avoid transferring human scent to them, and fenced off the area, the mother later moved her nest.

-Nests of cardinals, mourning doves, and an unidentified bird that constructed a small nest of pine needles and laid two small, creamy-white eggs speckled with blue are all near the Conroys. A pair of brown-headed cowbirds (Molothrus ater) hangs out in a red cedar outside their dining room. A pair of brown thrashers is working on a nest in the Chickasaw plum thicket near the Lindsays' house. Dave also saw two indigo buntings near the Deans' drive. Both he and Liz Conroy have seen barn swallows (Hirundo rustico) over or near the meadow, and Liz was startled early one morning by a common nighthawk (Chordeiles minor) flashing by as she walked in the meadow.

-Tom Edwards reports, with considerable excitement, a pair of beautiful swifts (Sceloporus sp.) living in a pine of wood chips and concrete blocks near his driveway. These spiny lizards are entirely undisturbed by car doors opening and shutting, but vanish - well, swiftly - when someone moves toward them. Tom also has seen a five-lined skink (Eumeces fasciatus) on a wood pile.

-Laura Conroy's other discoveries include the hatching of young spiders from the egg sac of an argiope spider (Argiope aurantia), a marble-sized, tan, tough silk

construction that overwintered on their porch; a male Gypsy moth (Lymantria dispar), which is not good news for local hardwood trees, and scorpions on a porch and in the house. These black arthropods carry their jointed tails crooked over their backs, can inflict a painful sting, and crawl into crevices and dark places. When scorpions have been sighted nearby it's a good idea to shake out footwear before you put it on again.

-Although the whippoorwills that called early in April seem to have moved on (Athens is at the extreme Southern edge of their nesting area), Chuck-will's-widows (Caprimulgus carolinensis) are noisily present. One Kenney Ridger counted 163 calls in a row before the bird took a break and she fell asleep. During the day, these short-winged, squatty birds rest in pine trees, river woodlands, or groves, well hidden by their mottled brown feathers. If they are flushed, their short flight is a noisy, whirring affair.

- Watch out for a box turtle crossing the road near the Blane-Everett mailbox. It has been sighted twice this summer. If you see it, help it to the side of the road, lest it be crushed by passing vehicles.

Please let Suzie Lindsay (549-5350) know your observations, sightings, and encounters! Suzanne A. Lindsay May 27, 2000

Kenney Ridge Nature Log
June, 2000

Summer, here officially, blazes from white-hot skies and bounces heat from air to parched earth and back again. In this summer of drought, perhaps the worst ever recorded in Georgia unless more rain comes soon, all of Kenney Ridge is stressed. In the open, the earth cracks into polygonal fractures as the clay shrinks. A passing shower moistens the top layers and heals the cracks, which soon reappear when the sun returns. Unvegetated banks and fields have hardened into a concrete-like pavement. Where grass and shrubs are established and there's a little more shade, the earth is not quite as hard, but it's drying out rapidly. Only in the woods are the lower layers of soil still moist. The topmost leaves are tinder-dry, and the hazard of fire is extremely high..

It may be okay for cacti, but other vegetation is having a hard time. Field grasses and herbs are blooming early and setting seed rapidly, many at well below their maximum height. Their quick maturation gives them a chance to leave offspring for another, perhaps more favorable, growing season. Erigeron , and field garlic dot the meadows with pale lavender. Queen Anne's Lace (Daucus carota) lifts its flat clusters sunward, especially in roadside ditches where a little moisture lingers. Look for the single deep purple floret that often occurs in the middle of the flower, and for the tiny spider that sometimes camouflages itself there. Cup the green, basket-like seed head and examine the flat, dill-like seeds within it. Here and there, late flowers of the magenta Verbena rigida are still blooming. Aloft, trumpet creeper (Campsis radicans) flaunts its orange-red tubes from the tops of thickets and trees. Look for a blur of tiny wings and listen for their whirring -- a hummingbird may be visiting the flowers.

A few plants are doing nicely in spite of the weather. Most of the nodding thistles (Carduus nutans) have gone to seed, but the pink tufts of another species, (Cirsium vulgare) are setting and dispersing seeds almost as soon as the blossoms open. Look for these aliens in the open fields, along roadsides, and in sunny open spaces in the woods. Nearby, especially along the Lindsays' road and at intervals in the meadow, rise the woolly gray-green leaves and tall yellow-bloomed stalk of the common mullein (Verbascum thapsus), another alien. This biennial matures over two years; six-inch young plants that will bloom next summer are inconspicuous now among the grasses. Near the garden, pokeweed (Phytolacca americana) is bearing its purple-black berries on red stalks ,amid large, deep green leaves. Remember that although the young leaves of this native plant can be boiled in several changes of water and eaten in the spring, all parts of the older plant are poisonous. It's possible to make an ink from the berries, but the color is not fast and soon fades to brown.

While grasses and herbs are relatively sparse, it's easier to see some insects and spiders. On a dewy morning, look for both orb and banded spiral webs of spiders in the meadows. Dragonflies occasionally come up from the river. One unidentified species sighted in the meadow had clear wings netted in brown, dark brown patches near the tips, and a white abdomen. If you are lucky, you may see what Dave Lindsay observed in the field opposite the Conroys' house: a very green grasshopper, just out of the molt, clinging to an old fennel stalk and slowly pumping fluid into its abdomen and crumpled wings. The grasshopper was completely undisturbed by onlookers during this vital task. The next day, an adult grasshopper of similar size and color flew from the same spot when walkers approached. Several species of grasshopper are consuming leaves of all sorts now. Because they are encased in a rigid exoskeleton made of tough chitin, they must molt to grow.

Human Kenney Ridgers continue to observe wildlife in many forms. Tom Edwards and Nancy Hunter report that the blue-tailed skink that lives at the end of their driveway flashes by regularly. Their latest visitor is a summer tanager (Piranga

rubra), a beautiful rosy-pink, yellow beaked male with wings and tail streaked with brown. Kenney Ridge is within the species' breeding range, but so far no female, which would have olive-colored feathers on its head, back, and wings, and deep yellow underparts, has appeared. Unlike the cardinal, the summer tanager does not have a crest; it also lacks the cardinal's black face.. Another look-alike species, the scarlet tanager, would have black wings and tail. Tom thinks a pair of cardinals is nesting nearby in a low area of the Collins' lot, so he's been able to make a direct comparison.

Bill Sheehan reports that the Carolina wren that nested under their porch in a tote box hung just below the deck beams, laid three tiny, cream-colored eggs but has abandoned them (see picture). Although the box was completely out of her reach, the alert presence of the Fiona's cat apparently disturbed the female sufficiently to drive her away.

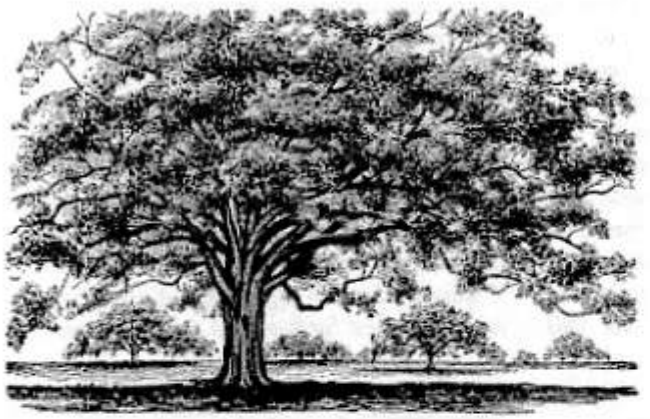
Liz, Mary, and Laura Conroy had the rare experience of seeing a gray fox streaking away from their front yard one evening. The slender animal ran with its pointed nose, head, back and plumed, bushy tail all in a low, level line, headed towards the woods on the southwestern edge of the meadow. One whiff of scent convinced their dog Hallie that this was something strange that he did not wish to chase. The StipeMaas family often have a redtail hawk soaring above their house, and deer often visit what's left of their pond for a quick drink.

Deer are everywhere, in fact, and sightings are so common, even in broad daylight, that it's wise to drive very carefully all the time. Several does with fawns feed regularly in the meadow and along the sides of the road. Yearling does are nearby, One young fawn parked itself in the Hunter-Edwards' front pine woods and rested, barely feet from the house, for over an hour on a hot afternoon. The deer are thin; they are desperate for tender, fresh foliage, and as the summer drags on very little will escape their nibbling. Although the electric fence at the KRCA garden seems to be discouraging them from raiding the plants there, the crops have sustained some damage. Between the deer and the rabbits, almost all the green beans, sunflowers, and a second planting of corn have disappeared.

Here are some remedies against the deer, none of which are likely to work for very long in this drought. On the garden signboard, a passing beautician suggested human hair, presumably scattered around plants or hung in small bags from branches. The droppings and urine of carnivores also are reputed to frighten the animals. (Curb your dog by the outer garden fence, perhaps?) Molly Swan and Dan Everett, who have gardens planted close to their houses, feel that their yard dogs, even tiny Scotty, keep the deer away. Several helpful people have suggested aluminum pie-plates or old CD-ROM disks hung on lines so they dance and glisten in the sun. Another reputed aid is bars of Ivory soap hung around plants.

Manita Dean looked for plants the deer aren't browsing, and found that lespedeza (the thin, dull green, spire-like plant with tiny, clasping leaves growing along roadsides and here and there in the meadows) and the tall, slender dog fennel (Eupatorium capillifolium.) whose fine, thread-like, brilliantly-green leaves are found in similar places, especially around the cul-de-sac, showed no damage. She cuts fennel stalks to hang across the wire cages of her sapling shrubs, and also suggests dousing plants with a tea made from chopped stems. Garden stores also carry commercial repellents. Really tall fences probably are the only sure-fire deterrent. Barring those, try some or all of the above ideas, hope for rain, and learn to bark!

Suzanne A. Lindsay June 26, 2000



Kenney Ridge Nature Log
September 2000

September's subtle shift from summer into fall is well under way, and signs of change are all around the Ridge. Even if no calendar marked the fall solstice (the point when days and nights are of equal length), the succession of flowering plants and grasses would testify to the gradual replacement of hot days, warm and humid nights, and long hours of intense sunlight, by cooler temperatures, shorter days, and paler light.

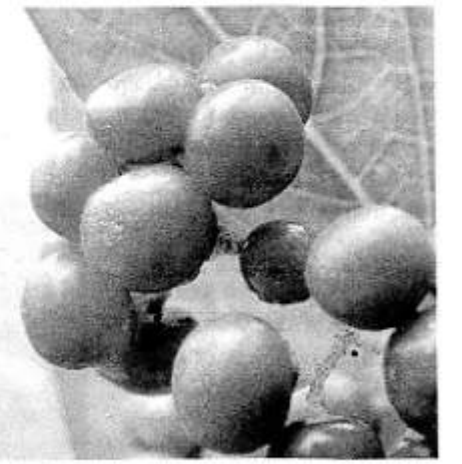
One spectacular display lingers on, however: the sudden thunderstorm triggered by a cold front, or the inflow of tropical moisture from the Gulf of Mexico. When towering cumulus clouds turn gray and then black, the Ridge often is in for a good soaking, accompanied by an extravaganza of thunder and lighting. Ridgers found out just how powerful these storms can be in mid-September, when lightning struck in several places. Carpenters at Erik Hinds' house saw a bolt land between them and the Alvernaz-Sheehan's home. An incandescent flash blazed, accompanied by a terrifying explosion. The lightning apparently traveled through the ground to the metal reinforcing rods in the floor of the Alvernaz-Sheehan's lowest level, and blew a small hole in the concrete, directly under a surge protector. Damaged electronic equipment needed repairs there and at the Hunter-Edwards' house next door. The Conroys also suffered some damage when another bolt hit near their house.

Safety precautions? Always use surge protectors on incoming lines and between wall plugs and equipment. Don't use computers, stereos, or telephones when a storm is imminent or underway. If possible, unplug equipment and detach telephone cables when thunder begins to rumble. Don't stand near windows or doors. Don't run showers or bathe, since electricity can travel along pipes and through water. Stay indoors; if you're caught outside, don't stand under a tree or out in a meadow where you are the highest point around. Crouch to the ground in low brush, or a ravine or ditch, well away from such natural lightning rods.

The storms of September have revived vegetation, however, and eased restrictions mean that outdoor plantings and the community garden now can be watered more frequently. The drought is not over, but this respite has stimulated a flush of new growth. The fall grasses are lush. Chet Thomas finds the display of Purple Top Grass (*Triodia flava*), which casts a waist- to almost shoulder-high veil of lavender over field and wayside, the most spectacular he has ever seen on the Ridge. Underfoot, Purple Love Grass (*Eragrostis spectabilis*) spreads a finely branched, spreading, 12- to 18-inch tall mist. The two- to three-foot green and purple shoots of Broomsedge (*Andropogon virginicus*) are beginning to show tufts of fluffy white seeds.

Still carpeting the meadows are the creamy blooms of Rabbit Tobacco (*Gnaphalium obtusifolium*), fuzzy white *Eupatorium* sp., and the brilliant yellow Camphorweed (*Heterotheca subaxillaris*) and golden Autumn Sneezeweed (*Helenium autumnale*). This last is particularly abundant in the power line clearing directly behind the Farmhouse. Beginning to bloom is Goldenrod (*Solidago* sp.). Its many species can interbreed and are difficult to identify precisely. The blooms at Kenny Ridge are plumose (having the shape of a plume); other species are wand-like or flat-topped. A Checklist of the Vascular Flora of Clarke County, Georgia, compiled in 1985 by Samuel B. Jones, Jr., and Nancy C. Coile of the Herbarium at UGA's Department of Botany, lists thirteen species for this small county alone.

Lightening crater in cement floor



Beauty Berry

Although most shady-place flowers have finished blooming, some new ones are appearing. In a flat, rocky portion of the stream bed in the Seventeen Acre Wood, the pale blue flowers of Lobelia sp. are standing with their roots almost in water. Nearby, a single small specimen is growing in the middle of the Blue-Dot Trail. Step over it carefully, please! Beauty Berry (*Callicarpa americana*) also is growing beside the trail near the spring where the stream rises. Its clusters of magenta berries almost glow in the subdued light of the woods.

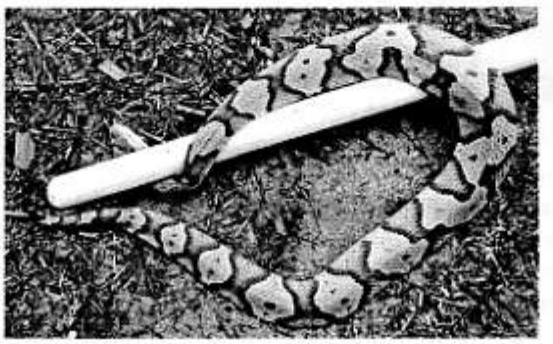
As well as flowers, the warm days and showers have encouraged many fungi in the woods. Look for velvety tan bracket fungi spreading up the side of a dead oak tree along the trail, or concentrically striped turkey-tail brackets on fallen limbs and trees. Mushrooms also abound in the meadows and wherever damp, rich, organic soils offer opportunity. A good guide to many species

is the National Audubon Society's Field Guide to North American Mushrooms, which classifies and illustrates fungi by their shapes, presence or absence of certain structures, and other characteristics. One charming example found by workers in the community garden is a Bird's Nest Fungus, a tiny (1/2 inch diameter) dark brown cup housing small tan "eggs" that are a part of this spore-bearing reproductive structure. Fungi as a group derive their energy from dead organic material, since they lack chloroplasts with which to synthesize their own food. They are among the decomposers in an ecological system, and play a very important part in the recycling of energy and nutrients.

With fall, reptiles and amphibians are on the move. Skipper StipeMaas spotted a box turtle near the road by their house, and Liz Conroy has seen one in her backyard and another on the Blue-Dot Trail. The California Center for Wildlife's Living With Wildlife, a guide to the critters who were here before we decided to live in their territories, notes that box turtles are one of four groups of freshwater turtles found in North America. They are terrestrial terrapins found in eastern forests and fields, unlike the aquatic sliders and snapping turtles that prefer rivers, ponds, and swamps. Their name derives from their ability to close up their high-domed shells into a box, withdrawing legs, head, and neck, and tail into the safety of a nearly-airtight cavity.

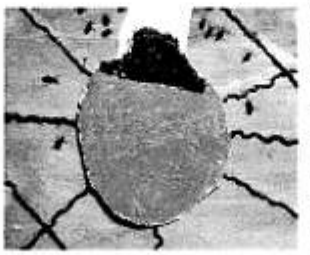
Dr. Whit Gibbons, a well-known expert in reptiles and amphibians who is based at the Savannah River Ecology Laboratory and UGA, reports a decline in many populations of turtles. In urban and suburban areas, turtles are crushed by automobiles, run over by lawn mowers, or are washed into storm drains where they die of starvation. They lose their living places, or habitats, when fields and forests are cleared. Living with Wildlife notes that even where habitat remains, dogs, foxes, raccoons, skunks, and opossums can devour eggs or young turtles and raccoons and coyotes can kill adults. Kenney Ridge has ideal habitat, so keep a sharp lookout, but remember: don't make "pets" of these wild creatures. Many species have been depleted by just such captures, especially of the more brightly-colored juveniles.

Snakes also are traveling overland, looking for winter denning sites, according to naturalists at Sandy Creek Nature Center. Kenney Ridgers continue to encounter copperheads, sometimes too close for safety. The StipeMaas' dog, Sandy, was bitten by a copperhead (*Agkistrodon contortix*) early in the month. Because the venom is not extremely toxic, Sandy was treated by a veterinarian with injections of antihistamines and other medications. Bill Sheehan killed a copperhead next to his back steps. The snakes are quick to strike when they feel threatened. In a recent column in the Athens Banner-Herald, Whit Gibbons stated that in a series of experiments he is conducting, copperheads were much more likely than rattlesnakes or cottonmouths to strike at his boots when he stood near them briefly. They inject relatively small amounts of venom, but no one wants to experience a bite. Learn to recognize this master of camouflage, especially among dry autumn leaves, and stay away from brush piles, rocky slopes, thick undergrowth and thickets. Always look before stepping.



Copperhead snake at Sheehans' house, pinned by broom handle

Other animals are traveling about or still caring for young. Early in September, Laura Conroy saw a male red-bellied woodpecker (*Melanerpes carolinus*), which sports a red cap and nape and lives and breeds in Georgia. Skipper StipeMaas spotted a similar bird on her house at the end of the month.



Painting collage by Laura of a porch spider's egg sack with spiderlings dispersing.

Laura reports that hummingbirds have been feeding from their zinnias and that she has sighted both a male and female house finch (*Carpodacus mexicanus*). This is not particularly good news, although the birds are attractive. Members of this invasive species were first released on the coast of New York in 1940. By 1980, they had spread south to Georgia, west to Illinois, and north to Maine, out-competing native species for food and nesting sites.

Copperhead Head

Under her front porch, Laura discovered ant-lions (Family Myrmeleontidae). Ant-lions are the larvae of an adult insect that looks much like a damselfly and eats pollen, sips nectar, or does not eat at all. It has four transparent wings finely veined in black and is about 1 3/4 inches long. The larvae, which Laura says "look like doodle bugs", excavate conical pits in sandy soil. When ants or other small insects tumble down into a pit, the larva ambushes it. Other species simply live in sand or conceal themselves near debris.

While insects abound, mushrooms are up, and most of the leaves are still green, try an early fall walk in the Seventeen Acre Wood. The woods glow green and gold against a brilliant blue sky that is reflected by the burnished surfaces of mature oak leaves. In the distance, a blue jay screams. The stream murmurs by, light glinting from its waters. Brilliantly green mosses conceal stumps and rocks. A flake of mica glistens on the pebbly path. Fallen trees are gray and brown stripes across the path, easy to cross but inviting you to rest a moment in the peace of the woods.

Text: Suzanne A. Lindsay

Photography and Layout: Jennie Alvernaz and Bill Sheehan

September 28, 2000

Kenney Ridge Nature Log

January 2003

Six weeks into the dead season —Shakespeare's "bleak midwinter"— Kenney Ridge shivers through what may be the coldest days of the year. A great surge of Arctic air envelops the land, spilling down from the northwest, around and over the Appalachians, and through the foothills to Athens. With the cold come brilliantly clear skies by day and night, a winter moon as remote and frosty as the stars, a blustering wind, and ice crystals precipitated from the air or pushing up from damp clay in sharp-edged columns.

The hungry days are here, too. Much of fall's ample forage is gone, dried into standing grasses or fallen from trees and shrubs. In the woods a gray snag moves, elongates, and becomes a deer easing away on silent hooves. There's little fresh grass left, so herbivores must make do with lower-quality dried plants or nibble the buds and bark of tender young woody plants. The Ridge's deer are the survivors of a two-month hunting season that concentrated them within its sanctuary. Although herds of up to nine appeared during December, individuals are more visible now, especially in the early morning and late evening.

Acorns have long since fallen from trees, forcing squirrels to forage among the leaves or seek hoards laid up in the fall. Down, too, are the fruits of persimmons and the flat black pods of honey locusts, favorite meals for opossums and raccoons. Fallen pecans and hickory nuts have been picked over by groundfeeders; overlooked, some will germinate into seedling trees in the spring.

In the fields and meadow verges, fluffy tufts of broomsedge seeds and bits of other grasses blow in a brisk wind. Birds and rodents must look harder for their food, and feeders set out by Ridgers are popular. On a dark night, two foxes lurk at the edges of a flood-lit yard, perhaps waiting their chances to pounce upon the field mice scurrying back and forth around seed flung to the ground. Water is scarce, too, as puddles and birdbaths freeze solidly.

In a clump of Chickasaw plums, a suet feeder protected against large birds and squirrels draws smaller visitors. Smilax rotundifolia vines twine through the plums' angular branches and their black berries offer a different kind of meal to the cardinals, mockingbirds, and blue jays that come to perch. Amid the grays of deciduous trees and browns of herbs, such evergreen vines preserve the memory of summer's foliage and offer winter shelter. Those introduced pests, Japanese honeysuckle and privet, also remain green.

Dark green pines, Eastern red cedars, and American hollies anchor the winter landscape. Protected against the drying winds of winter by the shape and waxy coatings of their needles and leaves, these beautiful natives have returned in force to the old fields and regenerating forests of the Ridge. As February and March wear on, examine the cedars carefully. Those with yellow structures at the tips of their branches are males that will release clouds and swirls of pollen in the spring. Those with pale gray-blue berries are females that will bear the next crop of fruits.

Cedars and pines alike provide perches for birds. A hawk surveys the meadow and then swoops down upon some unwary rodent. A crow clings to the topmost branch of another pine in the face of a brisk wind, swaying in ever-increasing arcs until it finally tumbles away. Juncoes fly from branch to branch and then drop to the ground to forage, their outer white tail feathers flashing against the ground.

Chickadees twitter about, and American goldfinches in drab winter plumage feed on thistle seeds. At frigid dawn a great blue heron flaps across the pale sky, heading for the river.

Even as sleet falls and the few remaining oak leaves crisp and curl and clasp themselves in deep winter, the slow return of light sets life stirring again. In the woods near the MacNairs' house, a great horned owl hoots in the night. These majestic birds, which hunt by night, establish territories, mate (sometimes for life), and nest in the late winter, well before most other birds. The Sibley Guide to Bird Life and Behavior notes that both night feeding and their reproductive pattern may help them compete with hawks, which also breed in woodlands and will prey upon young owls. Large owls do not construct nests, but borrow the previous season's nests of ravens, hawks, crows and other large birds.

For now and the forseeable future, these birds are threatened by a new scourge, the West Nile virus. Recent studies show that large raptors — eagles, hawks, and great horned owls — are vulnerable to this rapidly-spreading disease. A report in the Atlanta Journal – Constitution (December 29, 2002) finds that more than 140 species of birds have been stricken across the nation. In the Athens area, crows and jays were early victims, but the raptors and many smaller birds, such as chickadees, doves, herons, kingfishers, sparrows, warblers, woodpeckers, and wrens, can fall ill. The virus also kills mammals that include humans (rarely so far), cats, dogs, horses, squirrels, chipmunks, and bats, as well as some reptiles, such as alligators. It now seems that if a species is preyed upon by the mosquitoes that carry the disease, it's a potential host. Scientists at the U.S. Department of Agriculture fear that some species may vanish entirely. For many others, populations will decline unless and until individuals resistant to the virus pass that trait to their offspring.

There are a few things Ridgers can do to slow down the mosquito population. It's early to think about the mosquitoes of spring, but the occasional warm day reminds us how quickly insects can breed. Cleaning up sources of standing water, such as upturned planters, water saucers, and storage containers, and forming the habit of changing water in birdbaths frequently, will help. With breeding spots abounding in the woods and near streams, however, mosquitoes and the West Nile virus are here to stay.

In the meantime, it's a good time to intervene on the side of plants. Winter is excellent for planting trees and shrubs, according to Ms. Connie Head, Athens-Clarke Community Forester. It can be harder to find good specimens at local nurseries, but plants properly installed and watered (an inch a week if there's not that much rain) will have a good start on spring and summer growth. Ms. Head's recent demonstration of planting principles and practices at Kenney Ridge left us with a beautiful young redbud tree planted near the Farmhouse. She brought along, and still has available, a compendium of advice and information about the best ways to conserve, select, plant, and care for both native and introduced woody plants. "Best Management Practices for Community Trees: A Technical Guide to Tree Conservation in Athens-Clarke County, Georgia" is full of essential information. The listing of species by canopy area, recommended use, physical characteristics, and environmental characteristics and tolerances makes this a 'must-have" for Ridgers interested in landscaping or restoring native species. About the only thing that isn't summarized is the value of each species for wildlife habitat (food, shelter, or both). For more information and encouragement, Ridgers can reach Ms. Head at forester@co.clarke.ga.us.

Winter brings its own austere beauty to the Piedmont and Kenney Ridge. Under clear blue or sullen gray skies, in freeze or thaw, razor-sharp wind or unexpected warm calm, amid dry meadows, tangles of lichen-coated shrubs, or woodlands sculptural in their bareness, the land endures. It's up to us to live gracefully — and appreciatively — with the season.

January 24, 2003
Text: Suzanne Lindsay
Photos: Jim StipeMaas
Layout: Dave Lindsay

Kenney Ridge Nature Log

February 2003

Jim StipeMaas photo

Three-quarters through February, Kenney Ridge slips between winter and spring with deceptive ease. One day it's literally freezing, with a razor-sharp wind slicing through meadow and forest, and almost the next it's sixty degrees and so balmy that walkers shed their jackets and sweaters. Bouncing back and forth between extremes, what's the world to do?

It's far too early to write off winter. When ominous clouds move in and the wind blows from the northwest, temperatures glissade. Late one evening, freezing rain falls and sleet rattles on wood. The next morning, ice varnishes oak leaves and encases every twig and pine needle. Silvery mesh fences the community garden. The main storm slides north of Athens, but winter is a powerful presence.

Plants and animals still need their seasonal protections. Most perennial herbs, and deciduous woody plants remain dormant. Evergreens hold onto their old needles and leaves. Mostly as frost-proofed eggs and larvae, insects survive in crevices, under leaves, and buried in earth. A few (such as honeybees and yellow-jacket queens) overwinter in their adult forms. By mechanisms not yet fully understood, some can super-cool without freezing.

Birds fluff out their feathers, tuck in heads and feet, share body heat by huddling, and seek shelter in thickets, old nesting holes and cavities. They must forage as fast and extensively as possible in order to maintain their energy supplies, even as food is harder to find and days are still short.

Reptiles take to burrows, shelter under rocks and leaves, or dig into stream and pond bottoms. They may spend days or weeks in torpor if temperatures remain low. "Warm-blooded" animals that control their body temperatures within a narrow range also can slow down, although in the Georgia Piedmont's relatively mild winters not many truly hibernate. Some, such as mice, chipmunks and squirrels, cache nuts or seeds to eat during the hungry months. Fur thickens and body fat stored up in late summer and early autumn is burned slowly. When it's really cold, animals can conserve body heat by seeking out wind- and water-proof hiding places. Snug under fallen trees, in hollow limbs and standing snags, in deep dens or under old root balls, they wait for warmer weather.

Kenney Ridge's short, sharp cold snaps are half a continent away from the true depths of winter experienced in northern states and countries. Bernd Heinrich, an ecologist known for his studies of bumblebees, owls, ravens, and forests, describes the ingenious adaptations that living things have evolved there in his new book, "Winter World: The Ingenuity of Animal Survival" (New York: Harper-Collins, 2003). Given protective strategies raised to a fine art, enough individuals to keep a species going usually will survive even six months of snow and subfreezing. When local conditions wipe out a population, replacements eventually may move in.

On Kenney Ridge, the very on-again, off-again nature of winter poses difficulties. True, many animals can forage on all but a few days, but remaining active enough to do so means that they burn more calories than those that hibernate or enter torpor for long periods. Their biological clocks can't be reset too easily, or the finely-tuned mechanisms that govern growth and reproduction will be thrown off-kilter.

The length of the day (or shortness of the night) is the critical variable for many plants and animals. Hormonal systems respond strongly to this force, which operates in a far more regular pattern than day-to-day temperatures. Unusual warmth may set sap running and encourage buds to open prematurely, only to be withered by later frosts. If birds nest too soon, the insects and seeds needed to sustain nestlings may be in short supply; herbivores that give birth early may not find enough grazing to sustain their milk. Intricate food webs mean that predators that depend on an ample supply of other animals to feed their young may find the pickings poor too early in the year. In such circumstances, regular seasonal fluctuations in day length are

a far safer guide than day-to-day temperatures.

The timing of seasonal responses varies from species to species, particularly in plants. In the fall, the cranefly orchid (*Tipularia discolor* (Pursh) Nutt.) sprouts a single veined and puckered leaf, green above and purple below, that is visible all winter (see below). The leaf withers away in late spring, leaving the plant invisible aboveground until its flowering stalk emerges in late summer.

Evergreen plants retain their leaves during winter, but individual leaves slowly age and are shed. In February at Kenney Ridge, the first signs of spring in evergreen plants are seen in the enlarging, but still tightly closed, male flower buds of the eastern red cedar.

Biennial plants live over their first winter, gaining a head start on growth. The woolly mullein's (*Verbascum thapsus* L.) gray-green, fuzzy rosettes are prominent on

roadsides and open fields now. Close by may grow that sharp-needled, agressively-colonizing intruder, the bull thistle (*Cirsium vulgare* (Sav.) Ten.) (see right). As beautiful as the young plants are, it's not too soon to root them out. Even determined efforts are unlikely to eradicate them from the Ridge.

Suzie Lindsay photo

Basal leaves of several perennial species already are greening in sunny, sheltered spots, close to the ground where frosts may strike but wind chills are moderated. Clumps of grass show new growth at their bases. Most deciduous trees are still dormant, although male flowers dangle from birches near the stream in the Seventeen Acre Wood. In a sheltered spot on Three Oaks Common, a hawthorn (*Crataegus* sp.) tree has opened its buds prematurely, leaving it vulnerable to the frosts that are sure to come before true spring begins.

Suzie Lindsay photo

Near the Farmhouse, domestic plants are responding to the sun. Forsythia flower buds are opening; the leaves lag behind, and thus are less likely to be frost-nipped. Daffodils are up (right) and the first blossoms have opened.

Ridgers report that the first migratory birds of spring are returning. The Kissanes and Lindsays are entertaining flocks of goldfinches that compete for feeding perches and rapidly consume black thistle seed. The birds are not yet in breeding plumage, and most will move on to more northern areas to nest, but for now they can rest and put on weight. On February 20, Liz Conroy saw two pairs of bluebirds on Three Oaks Common. Perhaps they will be enticed to nest in the boxes put up by Kenney Ridge's young people.

Suzie Lindsay photo

Flickers call in the woods and a downy woodpecker thumps away at a tree near the Conroys' door, seemingly undisturbed by human and canine traffic. There's death, too. During a brilliant early sunrise that apparently turned glass into mirrors, a male cardinal flamed into a window on the Lindsays' deck, scattering embers of feathers as it fell, its neck broken. Did it challenge its reflected self in a territorial battle? If so, any gap closed quickly. A few hours later, a pair of cardinals sat quietly in a nearby plum thicket, undisturbed and unaware of the fallen bird.

Given the subtle signs of spring, it's hard to believe that cold and wind will return and that the flat gray light of late-winter days will eclipse the tentative sunshine of warm afternoons. Hard-- but necessary. Be not misled: old winter's not dead yet, although it may be ailing.

February 20, 2003
Text: Suzanne Lindsay
Photography: Jim StipeMaas, S. Lindsay
Layout: Dave Lindsay

Kenney Ridge Nature Log
April 2003


Lindsay photo

Headlong, pell-mell, that's spring a third of the way through its course at Kenney Ridge. Leaves green and expand, losing the pale yellows and pink-browns of March and early April. Flower buds swell, expand, and present and receive pollen. The grasses are well up, and May will see their flowering. Birds still sing in the mornings, but for many of them life is now a frantic round of finding food and ferrying it to their nestlings. Very small rabbits scurry across the road. The young fawns are here, but still hidden as their mothers graze on succulent plants. Thunderstorms expand and explode. Cool morning mists hang over the fields and wreathe the newly solid shapes of hardwood trees. It's wonderful!

Everywhere you look, there's growth and change. The blossoms of pear, redbud, and shadbush that began the month are long gone. The great purple swags of wisteria (see closeup below) enveloping shrubs and trees near the Oglethorpe Power spillway have faded.

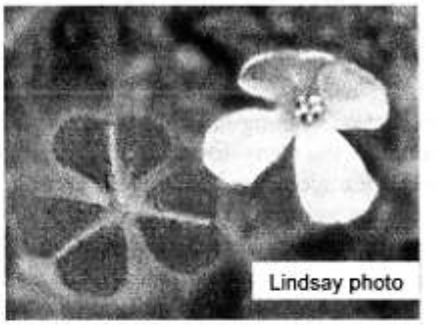

Lindsay photo

Wild azaleas along the stream near Nancy Stangle's yard have come and gone, and so have the dogwoods. The first nubbins of berries are developing on the dangling racemes of black cherry trees (*Prunus serotina* Ehrh.; see flower at head of page). Mayapples near the foot of the MacNairs' lot have the beginings of green fruits (carefully watched by O.C. and Manita Dean) hanging beneath them.

Flowers that have replaced the early bloomers include the white, five-petalled stars of blackberries, whose abundance gives hope for a good harvest of fruit but also indicates the success with which these old-field plants are colonizing the Ridge. Meadow and roadside plants include the first purple heads of the invasive *Verbena rigida*; emerging stands of golden Southern Ragwort (*Senecio anonymous*); a few bristly, dark red thistles (the aptly-named *Cirsium horridulum*); the single or sometimes two-flowered, dandelion-like heads of Hypochaeris radicata ,and delicate, lavender –blue spires of toadflax (now known as *Nuttallanthus canadensis*). Several species of clovers—yellow, red, and pale white — also prefer these sunny locations. The small, pink, pea-like flowers of narrow-leaved vetch (*Vicia sativa* L. ssp. *nigra* (L) Ehrh) are tucked in axils near its topmost compound leaves.

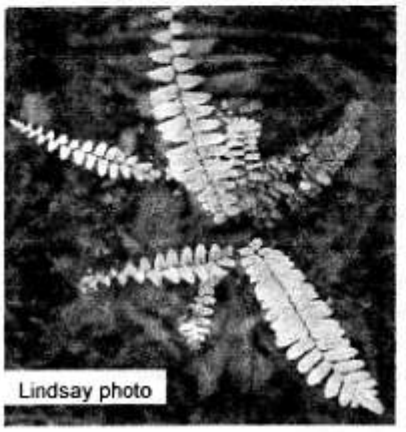
In the woods, two species of *Oxalis*, yellow and violet, are blooming, especially behind the Porters' lot. Their single flowers are borne above clover-like compound leaves; each of three leaflets has two lobes. Doug Elliott, an Appalachian naturalist and folklorist, reports that wildlife foragers call these plants "sour grass" and use both leaves and pointed green seedpods in salads.

Many of the early-blooming

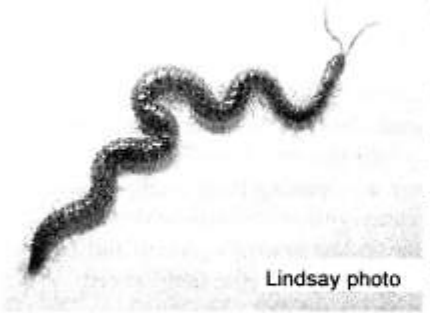

Lindsay photo

plants of shady places have faded as leaves expand and reduce the amount of sunlight falling on the forest floor, but some are just coming into flower. American holly trees are opening their small, creamy-yellow blooms, which appear on last season's growth and will develop into the familiar red berries in the fall. The small, greenish white flowers of wild grapevines are numerous and, rain permitting, may satisfy wild diners as well as humans who gather the fruit to make jam and jelly. Several species of ferns have come into full new leaves. One that's relatively inconspicuous and, according to Liz

Conroy, becoming less common because its habitat is shrinking, is ebony spleenwort. The narrow leaves and distinctive black stems of this small fern grow in deep shade, but also can tolerate the dryer slopes of regenerating forests. Look for them behind the Kissanes' and Porters' lots; once you learn to see them, you will find them relatively plentiful in this favored spot.


Lindsay photo

Abundant rain and warm temperatures have encouraged many species of insects, spiders, and other arthropods (the "jointed – foot" clans) to pursue their spring life cycles. Among the most interesting are the many-footed millipedes (see specimen below, measuring almost two inches long in this particular pose). Note the short an-


Lindsay photo

tennae on the head, and the two pairs of legs, or setae, borne by each apparent segment. Each pair moves forward in sequence, and the resulting wave of motion lets the millipede creep along in a sinuous fashion. Look for millipedes in shady damp places, especially under leaf litter, where they feed on decaying vegetation.

Spring arthropods help to feed many other animals. Ridgers already have seen that winged mammal, the little brown bat, hunting insects at dusk above Three Oaks Drive and the meadows. Birds that depend on insects to feed themselves and their young, however, are still stocking up at Kenney Ridge feeders. Some larger birds, such as crows, brown thrashers, mourning doves, and towhees, are picking over seeds spilled or thrown on the ground. Others, among them goldfinches, several species of sparrow (including the white-throated), bluebirds, indigo buntings, the equally blue but larger (with a thicker beak and a distinctive russet bar on each shoulder) blue grosbeak, cardinals, blue jays, the brown-headed cowbird (alas!) , and Eastern phoebes, jostle for space.

It's time, too, to put out feeders for hummingbirds. Only one species, the Ruby-throated, is common in the eastern United States. Don't stop listening, either. Some visiting birds are more easily heard than seen. Mike Conroy heard the beautiful songs of migrating Wood thrushes earlier this month, and the calls of the Chuck-will's-widow echo through the night-time woods.

Perhaps the most exciting sighting came on April 30, when Emma Kissane and Laura Conroy saw an immature Bald Eagle fly from the woods behind the Conroys' house. It landed on a tree twenty feet from them, so they are sure of the identification. There have been several previous sightings of presumed juveniles on the Ridge, but always at such a distance that the observers could not be sure that they were seeing an eagle and not just a very large hawk. The Ridge's meadows and location above the Oconee River and near the new Bear Creek Reservoir (which could provide fish) may have encouraged this visitor.

There is a lot of terrestrial food around. Rats, rabbits, snakes, mice, and lizards all sustain raptors. Many hawks take songbirds from their perches, the ground, or on the wing. Some birds (crows, jays, and mockingbirds among them) prey on the eggs or nestlings of other species. Unfortunately, freely roaming cats and dogs also will kill birds and eat their eggs, especially those of species that nest on the ground or in low bushes.

Fascinating things are happening by night as well as day. One of the more unusual is coming up on the night of May 15-16, when a total lunar eclipse will be visible. In the United States, the eclipse will begin at 9:06 pm Eastern Daylight Time, before moonrise, but watchers can see the color and brilliancy of the moon fade to a deep copper as the earth's shadow advances. The eclipse will be total from 11:14 pm EDT to 12:07 pm EDT, and the last bits of shadow will move past the moon by 1:30 am EDT, leaving a glowing full moon to ride across the sky. Perhaps moon-watching parties are in order — this celestial show doesn't happen often. For a good view, try the ball field and the Big Meadow, or even Three Oaks Drive itself.

As we go into May, look for a new wave of blossoming wildflowers, trees, and grasses. Spring's well-begun but there's much more to come.

April 30, 2003
Layout: Dave Lindsay
Text: Suzanne Lindsay
Photos: Suzanne Lindsay

Kenney Ridge Nature Log

May 2003

Lindsay photo

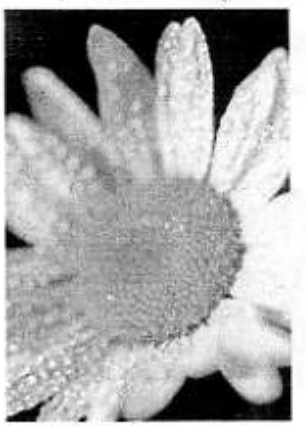
Field and flower, leaf and stream, sun and cloud and sky alike proclaim the full glory of May at Kenney Ridge. Let us now praise the brilliant green of young grape leaves (see above) radiant in the sun, the soft green of tulip poplars adorned by yellow-orange blossoms, the reaching chartreuse spires of new pine tips, the sharp-edged blades of grass that slice the meadow into a million vibrant fragments. Praise, too, the green and white and blue reflections that shatter into mosaics in rain puddles and the Seventeen-Acre stream, and the white and yellow and purple flowers that spangle roadsides and grassy places.

Watch the swarming of ants, departing their nests by the hundreds as a queen makes her mating flight. Their fragile, networked pairs of wings pull them toward the sky and a competition only one can win. Catch a sidelong glimpse of a lizard resting on a fallen branch before its nimble magician's act spirits it from sight. Admire a butterfly seeking nectar on a golden flower, or perched on wet clay in search of minerals.

Listen to the soft call of mourning doves, the challenges flung from bird to bird at dawn, the monotonous cry of the chuck-will's-widow in the late night. Rest in the hush of the forest just before a thunderstorm. Hear the rush and roar of wind in the treetops transmute into the deep vibrations of drops on a roof, and then into the steady drip of eaves on a rainy day. Feel the damp embrace of summer fog, the steamy warmth of mid-day, the heat of sun and the soothing coolness of shade. Finger spiky cedar branches, stroke the skin-soft surface of a young oak leaf, and touch a cautious hand to the needles of a thistle leaf. If you find a feather, stroke your cheek (or better still, a child's) with it.

Inhale the richness of damp woods, the acrid tang of privet, the elusive scent of the chinaberry's blue-starred flowers. Crush a handful of grass stems and smell the sap and under that, the crisp green odor of light-capturing, life-sustaining chlorophyll.

Walk around the Ridge to celebrate the show put on by flowering plants. Wild roses and cherry tree blossoms have faded, but honeysuckle lingers. Ox-eyed Daisies (*Chrysanthemus leucanthemum*; see below) stand next to golden coreopsis *(Coreopsis pubescens Elliot*) along the bank by the Deans' entrance. The orange flowers of trumpet creeper (*Campsis radicans*) twine over trees and shrubs. A transplanted clump of evening primrose (*Oenothera speciosa*), almost hidden by grass, blooms on by the Warrick-Thomas mailbox. The first few blossoms of Queen Anne's lace (*Dacuta carota*) lift their fragile domes along the roadside.



Lindsay photo

The fruiting season is beginning. Encouraged by ample rain, blackberries (*Rubus sp.*) are still green but expanding rapidly. At this rate, they'll be ready for eating by early June. Rose hips (useful for tea and jam) are forming but are still a long way from maturity. The seeds of early-blooming spring annuals already are scattering. Many grasses have reached their full heights, engulfing last autumn's dried stalks. Deer graze on all this bounty along the roads and in the meadows, seeking out the young and tender leaves, so intent on feeding that a quiet approach is slow to startle them.

In the community garden, humans are working regularly to bring their own crops along. There's still space available for planting early summer vegetables, in what promises to be a fine growing year. Still, more rain will be needed throughout the summer and the frost-free months of fall. Statewide water restrictions begin on June 1 but are

voluntary for localities this year, according to the Georgia Department of Environmental Protection. As long as drought holds off, property owners at odd– numbered addresses may water on Tuesdays, Thursdays, and Sundays, at any time of the day. Even-numbered or unnumbered addresses may water at any time on Mondays, Wednesdays, and Saturdays. If state-wide or Athens-Clarke County water supplies begin to shrink, more stringent rules will be adopted.

All summer long, however, Kenney Ridgers can find fresh organic produce at many local groceries (especially Earth Fare and Phoenix) and at grower's markets. The Athens Downtown Farmers' Market will be open through mid-August from 7 am to 12 noon each Saturday at 300 College Avenue. The Athens Green Market is open year-round from 9 am to 1 pm at the Big City Bread patio. Go early for the widest selection!

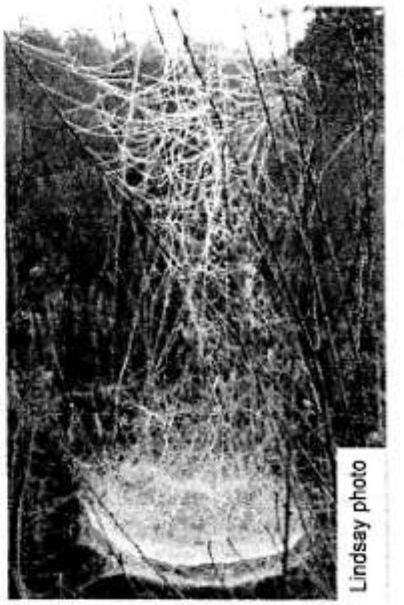
Drought seems less threatening right now than the natural tendency of wild critters to snack on crops and other plantings. Local nurseries carry a variety of rabbit-and deer-chasing products that can be sprinkled or sprayed on plants and shrubs. Frank Henning of the ACC Cooperative Extension Service office suggests using chicken wire over low-growing annuals; the wire will prevent deer from grazing plant crowns to the ground. He notes, however, that the only sure defense is planting things the deer don't like to eat. For a locais open year-round from 9am to 1pm on Saturdays at the Big City Bread l list, go to http://www.ces.uga.edu/Agriculture/horticulture/deer.html.

Local nurseries also are good sources of advice. Growers at Thyme After Thyme (550 Athens Road, Winterville, Ga.) recommend many culinary and decorative herbs, for example, since their pungency makes them unattractive to browsers. The nursery's catalog lists a variety of native plants that can withstand deer and/or rabbits, including yarrow (*Achillea*), columbine (*Aquilegia canadensis*),Goat's beard (*Aruncus sp.),* various milkweeds (*Asclepias sp.*, some of which grow wild at Kenney Ridge), many different asters (*Aster sp.*), false indigo (*Baptisia sp.*), turtleheads (*Chelone sp.)* coneflowers *(Echinacea sp.),* Joe Pye weed (*Eupatorium maculatum*) sunflowers of all sizes (*Helianthus sp.),* rose mallow *(Hibiscus sp.)*, cardinal flower (*Lobelia fulgens*) and great blue lobelia (*Lobelia syphilitica*; note that these two require constantly moist or wet conditions), wild bergamot (*Monarda fistulosa*), several species of *Phlox*, coneflowers (*Rudbeckia sp.)*, bloodroot (*Sanguinaria canadense*), and various violets (*Viola sp.*). Many of the native ferns also survive local grazers; witness the abundant Christmas ferns (*Polysticum acrostichoides*) found in gullies across Kenney Ridge. A good horticulturalist can suggest native plants for a variety of growing conditions, based on local experience and feedback.

There is always selective thinning and transplanting of what already grows here. No one suggests poison ivy (see below) as a decorative vine, but trumpet creeper, wild grape, and even smilax can be useful in the right places. Trimming away underbrush from a well-located tree or shrub can help it become a specimen plant. Seedlings of our native hardwoods are best transplanted in the fall, but mark candidates now before they're submerged in herbaceous plants. Remember, too, that many plants are recovering from five hard, dry years, and are ready for a spurt in growth. (Liz Conroy notes that trees she thought long dead have put out new leaves this spring.) Gathering and planting the seeds of native plants is another option, but one that may be best undertaken with the help of one of several good guides to the art.


Lindsay photo

What's interesting, in fact, is the renewed commercial interest in


Lindsay photo

gardening and landscaping with native plant materials. It's not hard to see why, when the initial cost and maintenance requirements of non-native species are so high. Practical considerations aside, preserving and replanting native species, endangered or not, are important values for a conservation– and preservation-oriented community such as Kenney Ridge hopes to be.

Think of these 132 acres as a web of interacting forces, living and nonliving, as complex and intricate as a spider's home in the meadow.

May 26, 2003
Layout: Dave Lindsay
Text: Suzanne Lindsay
Photos: Dave and Suzanne Lindsay

Kenney Ridge Nature Log

August
2003

Summer growth

August plunges into the depths of summer at Kenney Ridge, submerged in oceans of hot sunlight, airborne water, and the deepest, darkest greens of the year. Days in the 90s, mornings floating in steamy mist, sudden drenching thunderstorms from towering cumuli, light breezes that do not cool — that's the last full month of summer. Rainfall for the year is almost seven inches above normal as the month ends, but much of the rain has come an inch or more at a time and has run off to creeks and rivers. Even so, soils are moist and plants and animals are thriving.

We haven't seen growth like this for almost five years. Many young pines and hardwoods, such as Tulip Poplars and Sweet Gums, are putting out a second set of new shoots. Herbs and grasses are tall, lush, and flowering or setting seed heavily. Bare spots on the banks and roadsides have filled in with new plants. Vines are tangled high in trees and sprawled over shrubs. Trees cast deep shadows on the moist undergrowth.

True, there are signs that the season will end soon (officially, at 6:47 am on September 23, when the day and night are of equal length and Fall arrives). Trees of the genus *Prunus,* which includes wild cherries and many closely related species, are inexplicably defoliated almost to the tips of their branches, with no insect predators visible. Grapevines are shedding golden leaves here and there. The flowers of spring and early summer have gone to seed or even vanished entirely, and a new crop of fall-bloomers is arriving. Those already visible include the first goldenrods, rabbit tobacco, fall ageratums, crane-fly orchids, and lespedeza. Dog fennel will mature soon and miner's lettuce is eight feet tall in some spots.

Fruits

The fruits of the summer are ripening. Wild grapes near the Deans' driveway are darkening from green to dusky purple. Pokeweeds near the community garden are heavy with black-red berries. Locust trees along the old farm road nearby dangle drying pods by the hundreds. Sumacs will bear heavily this year. Staghorn Sumac (*Rhus typhina L.*) already sports its brilliant crimson berries along the main road and on Three Oaks Common.

Greenish-white panicles of flowers are developing on thickets of Smooth Sumac (*Rhus glabra L.*; see picture above) around the meadows and near the road. Some of the thickets, especially near the Kissanes' front line, are better than 15 feet tall.

Animals

Small rodents have done well this summer. There's been plenty of food for rabbits, mice, rats, chipmunks, and squirrels. Lots of rodents around means an ample table for others. Snakes flourish, and both Liz Conroy and Delene Porter witnessed an interesting (and somewhat scary) reptilian behavior when snakes they encountered - a black racer for Liz and a copperhead for Delene - rattled their tails against gravel in a warning all too evocative of rattlesnakes (which have not been seen on Kenney Ridge).

Birds of prey also prosper when rodents and small mammals abound. Red-tailed hawks circle near Nancy Stangle's woods and may be nesting there. The hoots of great horned owls and cries of screech owls echo through the Seventeen Acre Woods. Seed-eating birds have raised their broods, but some that will migrate later in the fall are still around. Goldfinches still in breeding plumage have visited several feeders. Young cardinals will stay year-round. Empty nests are left behind, such as the wren's nest, complete with vociferous babies, that Nancy Hunter found in a potted begonia on the Deans' porch in July.

Webworms

Insect populations have expanded right along with the resources that sustain them. The shrill calls of Dog-day Cicadas have died away, but butterflies are everywhere. Tents of the fall webworm (*Hypanthia cunea* (Drury)) are draped over the branch-tips of many hardwoods and a few pines (see below). The larvae of this moth hatch from masses of hundreds of

eggs that the adult females lay under leaves on their preferred trees, which include pecan, walnut, American elm, fruit trees, some maples, persimmons, and sweet gums. On Kenney Ridge, persimmons seem to be particularly attractive this summer, but the pecan by the Farmhouse has at least six webs on it. Pecan production can be lowered by an infestation; otherwise, the larvae do little permanent or economic damage.

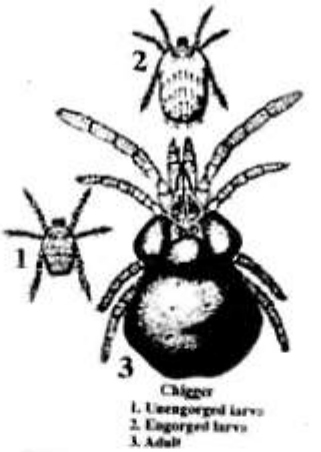
The larvae (below) are a soft yellowish –green, with a darker stripe on their backs, yellow stripes down their sides, and long gray hairs. They grow up to an inch long and share the large web they spin over leaves and branches until they are almost ready to pupate. They

then leave the web to feed individually, before dropping to leaves or soil to spin their cocoons. They will emerge as adults next May to August.

Chiggers

Almost invisible, in contrast, are those scourges of summer, chiggers. A website (http://ohioline.osu.edu/hyg-fact/2000/2100.html) maintained by the Ohio State University Extension devotes three pages to *Trombicula alfreddugesi* (Oudemans), noting that "probably no creature on earth can cause as much torment for its size". For a sketch of the voracious chigger larva, see below.

Avoiding chiggers is a matter of long pants tucked into socks, shirts tucked into waistbands, and dustings of sulphur or insecticide on limbs, clothing and shoes. Pallia-



Chigger
1. Unengorged larva
2. Engorged larva
3. Adult

tives? O.C. Dean advises taking a hot, soapy shower as soon as you return home. The OSU site suggests washing exposed clothing similarly and/or exposing it to hot sunlight. After a childhood spent in South Georgia, where the pests bite year-round, Skipper StipeMaas swears by wiping arms, legs, waists, and other tender areas with rubbing alcohol, and treating bites by soaking in a bath to which household bleach has been added. Jay Nackashi paints bites with clear nail polish. Cortisone creams or calamine lotion also help.

Vignettes of animal life on the Ridge this summer include Tom Edward's encounter with a female possum bearing four young on her back, with a fifth toddling behind. Periodically, the walker would hurl itself onto her back, dislodging another that then would trail along before regaining a perch. The family apparently lives under the Hunter-Edwards' deck.

Mars

From the Ridge to Mars is a long, long way, but late August saw the planet nearer than in almost 60,000 years. Mike Conroy explains:

"This month Mars is the closest it's been since Neanderthals walked Europe. Monday night 25 August the Conroys viewed Mars from their driveway at about 10:15 pm through Mike's 45-power spotting scope. Mars was a striking rust red to the unaided eye, the brightest object in the moonless sky. Clearly visible with the scope was the large central dark region, Syrtis Major. To the lower right could be seen the bright southern polar cap, composed mainly of frozen carbon dioxide (dry ice). No signs were visible of the infamous canali, which turn-of-the-century skygazers took for evidence of intelligent life on the fourth rock. Nor could we see the two moons, Deimos (terror) or Phobos (fear), "discovered" by Jonathan Swift 150 years in advance of the first astronomical sighting. Observations continue through the week, in the knowledge that this will be the closest any of us likely ever will be to our third nearest celestial neighbor (after the Moon and Venus)."

August 29, 2003
Layout: Dave Lindsay
Text: Suzanne Lindsay
Photos: Dave and Suzanne Lindsay

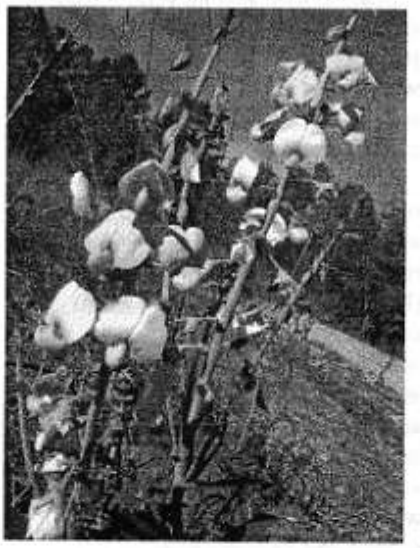
Kenney Ridge Nature Log

September-October 2003

The last day of October dawns crisp and cool. Pink and orange clouds glow against a pale gray sky, outlining black branches tipped with clumps of leaves. A thin mist rises from the Big Meadow. Dew lies on grasses and coats fragile spider webs. The day will be clear and warm in the afternoon, but daylight will last only eleven hours. A third of the way through Fall, the natural world of Kenney Ridge is slowing down.

September was the see-saw month, hot and humid one day and extending a milder mercy the next. The last flowers of the hot months emerged, including the tiny, green-white blooms of many grasses. Ridgers especially noticed heavy stands of *Lespedeza* spp. along roadsides and in fields. Chet Thomas, one of the Ridge's resident landscape architects, notes that these alien plants often are seeded in or establish themselves through natural spread on impoverished and bare soils. There they help to control erosion and fix nitrogen, but initially out-compete native vegetation. To control them, he recommends mowing before seed sets and carefully controlled burning. In time, the familiar grasses and herbs of the meadows should supplant them.

The goldenrods (*Solidago* spp.) and composites of mid– and late September now are fading rapidly. Dog-fennel (*Eupatorium capillifolium* (Lam.) Small) droops heavy heads on the woodland edge. The last few magenta fruits of beautyberry (*Callicarpa americana* L) are falling. The sunflowers and lobelia that volunteered along the margins of the ditch in front of the Dean's house have long since set their seeds. What remain are various species of fall-blooming asters, scattered clumps of yellow-flowered camphorweed, and a surprise (below). Appearing suddenly in the meadow near the western



turnaround, Showy Crotalaria (*Crotalaria spectabilis* Roth)sports bright yellow pea-like blooms.

It's a muted fall so far. Parched by a dry spell early on, many leaves have withered and dropped without turning the glowing yellows and oranges and reds that North Georgians always hope to see. There's still a chance for the deep crimsons and russets of the oaks to show, but tulip trees, wild cherries, and many sweet gums are already bare.

As plants on the Ridge complete their seasons of growth, other living things are responding to changes in light and temperature. Squirrels have raised their late-summer litters and are harvesting nuts and seeds. The rabbits, mice, and rats that so far have survived the fierce predation of hawks, owls, snakes, foxes, and domestic animals now must turn to winter forage and find snug burrows or nests.

Eastern white-tailed deer are entering their breeding season, just as hunting season begins to thin their ranks. Ridgers have heard gunshots beyond our boundaries, and many wonder if the deer take refuge in this sanctuary. Those that do appear show the gray-brown coats of winter rather than the reddish-tan of spring and summer.

Insects and arthropods are moving to another stage of life. Only a few butterflies still hunt for nectar. The last caterpillars, such as the Polyphemus shown below, are spinning their cocoons. Native to

the entire continental U.S., the Polyphemus moth has wings over five inches wide as an adult and is named for the one-eyed Greek giant because of the large "eyespots" on its hind wings. Its fat, brilliant green caterpillars are close to three inches long and feed on oak, hickory elm, maple, and other hardwood trees and shrubs. This specimen was found on the base of a forest-facing wall of the Lindsays' house. Captured for photography, it began to spin its cocoon against the lid of the jar that held it. It was hastily returned to the cool woods, where it could complete its preparations for over-wintering.

Other cocoons are everywhere, tucked under leaves and in crevices, draping the corners of porches, and spun against logs and under decks. Even more noticeable are the fall webs of spiders, eight-legged hunters of insects and other prey.

The wide orb webs of the "writing spider" and its cousins (*Argiope* spp.) hang between trees and shrubs, positioned to intercept unwary fliers of day and night. A web may also contain a yellow or tan silk sphere, the case spun by a female to contain its eggs. In some species, the female guards its egg case carefully and may remain to protect the newly-hatched young until they disperse.

For example, in a curled leaf of a small oak sapling (below), Liz

Conroy found newly hatched young spiders, looking like nothing so much as small oval seeds with legs. Hovering over them among scattered strands of silk was an adult (below), probably a female

Lynx spider. The adult held its ground even when a camera approached it closely. The distinctive chevron markings on its tapered, light olive-colored abdomen , the cluster of eyes at the front of its cephalothorax, and its yellow legs studded with black bristles, seem to put it among the Family Oxyopidae, which hunt small insects and do not spin webs. Fewer than twenty species live in North America.

Particularly active and visible on three trunks, along house walls and foundations, and even indoors right now are Daddy-long-legs (Family Phalangiidae), sometimes called harvestmen because the first species to be described were found in the harvest season of fall. These arachnids have a small, brownish body suspended over four pairs of very long, slender legs. When one walks, its body sinks low to the ground and its legs thrust up, out, and down. The Eastern Daddy-long-legs (*Leiobunum* spp.) feeds on very small insects, mites, and the juices of plants. The Brown Daddy-long-legs (*Phalangium opilio*), adds decaying organic matter to its diet. Females of both species push their eggs through a sharp ovipositor as deeply as possible into the soil, where the eggs overwinter and hatch in the spring. Most of the adults die in cold weather.

While insects and crustaceans scurry about in their usual habitats, other animals are on the move. Ridgers usually see at least a few Monarch butterflies, which migrate from northern areas to Mexico to overwinter in great masses concentrated in a very few areas. Many fall-migrating birds already have passed through Athens, and northern frosts will send the rest along soon. Winter residents, such as juncoes, and year-round residents, such as red-tail hawks, Southern turkey vultures, cardinals, jays, crows, and mockingbirds, soon will be most frequently sighted in and above the fields and woods.

Even amphibians seek out sheltered spots. A weekend visitor to Kenney Ridge found, late in October, a young Eastern Box Turtle crawling across Three Oaks Drive. Vividly marked in yellow over brown, the turtle had not yet developed the red-streaked head characteristic of adults. The turtle was released quickly. It probably was seeking a refuge, or hibernaculum, where it would be protected from deadly low temperatures. Box turtles can live for many years, so this one may see many seasons to come on Kenney Ridge.

As the days grow shorter, the dark nights lose one source of living light. Those ambulatory lanterns of summer, fireflies, have long since laid their eggs and died. Liz Conroy spotted one lone specimen on October 10, flashing on and off in a tree near Cori and Jay Nackashi's driveway.

Another form of biochemical light may last longer. A few days earlier, Liz saw phosphorescent fungi along a trail in the woods. Their cold and ghostly light somehow suits the season of endings.

October 31, 2003
Layout: Dave Lindsay
Text: Suzanne Lindsay
Photos: Dave Lindsay

Before

Kenney Ridge Nature Log

January 2005

After

Taking Cover

A month into winter, Kenney Ridge lies quietly under weather that hasn't been able to make up its mind since December. Cold, wet, gray days; sudden deep frost followed by brilliant blue skies; surges of warmth that mislead the daffodils on the southern slope behind the Deans' house into blooming at least two weeks earlier than usual; the threat of snow, sleet, and ice: it's all January.

The most visible change, however, is in the meadows of the Ridge. Closely mown in mid-month to remove the brush and sapling trees that eventually would turn fields into forest through the inexorable process called succession, the land has lost its autumnal covering of knee-high, golden-brown and burnt-sienna grasses and herbs (see above). Now stubble stretches over rise and dip, scarcely concealing the bones of the earth.

Mowing temporarily but drastically has changed the living places (habitat) and daily lives of many creatures of the Ridge. Without tall grasses to break the wind and retard evaporation, the microclimate near the earth is cooler, dryer, and less hospitable to ground-dwelling insects and other invertebrates. Mice, rats, snakes, rabbits, and other small creatures have lost the cover that offered them shelter from the worst of the weather and hid them from the eyes of predators. White-tailed deer have both won and lost. Their resting places under cedars are more exposed, but still-green leaves at the bases of old grasses are far more accessible.

The hunters have gained. Foxes, larger snakes, and regrettably, cats and dogs, can find their prey and pounce accurately. Soaring or sitting watchfully on snags or trees, hawks can spy the slightest movement. Owls gliding noiselessly under a cold winter moon can take deadly aim on small nocturnal foragers.

This tidy landscape will soon change again. In a month or two, dormant plants will begin to grow and last year's seeds will sprout, gradually re-creating the tall-grass meadows. In the meantime, uncut islands of trees and those classic

Southern refuges, B'rer Rabbit's briar patches (see below) offer concealment and protection. It's easy to see why that wily rabbit said one thing but wanted another. The thickly interwoven canes and sharp thorns of blackberries defeat most hunters. Their mounds shelter slithering and four-footed animals as well as small birds.

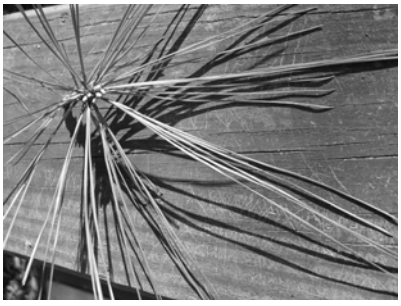
Blackberry patches themselves come and go in the process of succession. One of the first shrubs to invade former farmland, they flourish in full sun, but later are shaded out by maturing trees. In fields and along roads, they are messy but essential bits of habitat. Leaving a brier patch or two in your own part of Kenney Ridge encourages not only small critters, but also the predators that depend upon them.

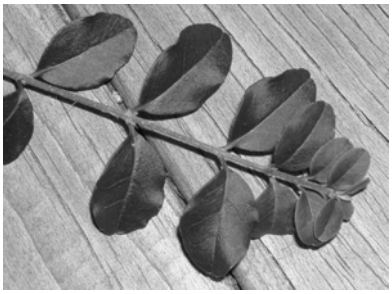
Once trees have returned, the lowly brush pile serves the same functions. When Ridgers clear or thin some of their woods, piling deadfalls and trimmings together offers shelter to the animals that thrive in forested areas. The Conroys once watched a fox that denned in a backyard pile and, no doubt, dined on B'rer Rabbit's cousins as well as the Goggins' chickens!

Even as winter's harshest weather comes to the Ridge, some animals are starting the next generation on its way. From the forest behind the MacNairs' house

and the deep woods above the river

Winter Greens





come the solemn calls of Great Horned Owls (Bubo virginianus). Breeding from the northern tree line of Eastern North America all the way south to the Gulf of Mexico, this large and powerful raptor is at the very top feeding level of nighttime predators. It will eat just about any small mammal, from bats, tiny mice, and shrews to rats, squirrels, rabbits, opossums, raccoons, and -- keep kitty inside at night - - even house cats. Ninety percent of its diet comes from these sources; the remaining ten percent is made up of birds large and small. Great blue herons, geese, ducks, grouse, partridges, doves, crows, and the occasional domestic chicken fall foul of this supremely efficient hunter. Even other raptors (predatory birds) are no match for it. Just about any owl or hawk that frequents southern woodlands, fringe forests, or meadows is a target, including the Ridge's Red-tail Hawks, Eastern Screech Owls, and Barred Owls.

Great Horned Owls begin nesting as soon as late November or early December in Georgia. They take over nests originally built by Bald Eagles, Red-tailed and Red-Shouldered Hawks, and even the stick-and-leaf constructions of squirrels. The one to five white eggs hatch in 30 to 37 days, and the young owls leave their nests about six weeks later. They depend on their parents for food for many months, going entirely on their own in late October.

In mid-January, Dave Lindsay found the feathers of a Red-Tailed Hawk in a ravine in the Seventeen-Acre Woods. The feathers had been ripped out in clumps; no bones were present. The bird may well have fallen to a Great Horned Owl. These very adaptable hawks do well in old-field and agricultural habitats; they hunt both from the air and from scattered trees and groves. For many years, red-tails have hunted the UGA campus and downtown Athens, where flocks of pigeons present easy and unmourned targets. These beautiful hawks feed on other birds (up to the sizes of pheasants and crows) and a wide variety of small mammals and snakes. They also will take domestic cats -- keep kitty inside, period.

Red-tails nest high in the branches of large and dominant trees - - at Kenney Ridge, pines or oaks. They build prominent stick nests and lay their eggs as early as the end of January. The eggs hatch a little over a month later, about the time that young Great Horned Owls are leaving their nests. The young hawks, which depend for food on their parents' daytime hunting of many of the same species the owls hunt at night, stay in the nest for about six weeks and nearby for another month. Their later hatching means that hawks and owls are not competing intensively for food for their offspring at the same time.

The bare winter branches of Kenney Ridge's hardwood trees make it easier to spot owl and hawk nests. All is not stark outline, however. Winter greens soften the severe blacks, browns, and grays of the forests. Protected by waxy coatings that help to keep their leaves or needles from drying out, evergreen trees, shrubs, vines, and plants survive the harshest weather. Eastern red cedar, American holly, loblolly pine, honeysuckle, and privet (far left, from top to bottom) are among the most visible species. On the forest floor, Christmas ferns persist post-holiday. The single pleated leaf of the crane-fly orchid, green above and purple below, reminds Ridgers that even in the first month of a new year, new life and growth begin.

January 27, 2005
Layout: Dave Lindsay
Text: Suzanne Lindsay
Photos: Dave Lindsay

Kenney Ridge Nature Log

February 2005

From this... **And this...**

February's Flip-Flops

It's January that has the "two-faced" tag, but this February on the Ridge has been just as hard to predict. It began with snow and ended with earth-shaking thunderstorms and hail, but in between came brilliant skies and 70-degree (F.) days that could fool anyone into thinking that Spring had arrived.

On good days, bare branches (above) carved angular slashes in a pale blue backdrop. At sunset, each a little later than the day before, the uncompromising shapes of hardwoods were deepest black against fiery red-gold. On bad days, the Ridge was gray-on-gray,sober in frost-bleached or sodden browns and tans, or white with frost.

Midwinter stresses most animals severely. Temperatures oscillate, and the coldest days of the year often come in February. There's not much food left. Berries and nuts have long since been harvested; seeds have fallen or been blown away; new generations of insects haven't yet hatched.

The living things of Kenney Ridge have many strategies for surviving such harsh conditions. Insects and other invertebrates hide under rocks, in crevices of trees and human structures, or deep among leaves. Many simply die, leaving eggs or larvae behind to emerge in warmer times. Frogs and salamanders burrow into mud and stream bottoms. Snakes retreat to dens under rocks and roots and live on stored-up energy.

Squirrels keep to their nests and when they do come out, seek caches of nuts hidden earlier. Rabbits and other small rodents consume grass pulled into burrows and emerge infrequently. The hunters - - foxes, coyotes, and predatory birds - - are ever-alert for food, dead or alive. Carrion, small unwary creatures in woods or fields, or birds at rest or in flight, are all potential meals.

Birds puff up their feathers and seek shelter in the worst weather. They look for old food stores (blue jays are well known for stashing acorns during the Fall) and forage for what natural foods they can find. Where feeders are available, they become steady customers. That's why, if you feed at all, you should offer seeds, suet, and fresh water throughout the cold months. Ridgers also have noticed that just before a storm, birds are especially active around their feeders. The local Audubon Society chapter, in fact, is interested in documenting such behavior, which was reported all across Athens just before the January ice storm.

...To this

Deer turn to acorns and the rough browse of winter evergreens. Even humans respond: cold, wet days make drinking hot soup or cocoa from a well-stocked pantry and curling up in a warm house almost irresistible. We even speak laughingly of "hibernating". We don't go that far, but our urges to accumulate food, seek warm places, add warm coverings, and reduce physical activity are more or less conscious versions of the instincts that help other animals survive.

But then, there are the warm spells that produce the glorious trumpets of naturalized daffodils (left) between sharp frosts. The first fresh, new food appears when thin, blue-green leaves of wild garlic sprout from bulbs buried in the Ridge's meadows and roadsides. Their flowers won't appear until April or May, but the plants can be used judiciously for seasoning long before then.

Coarse meadow grasses begin to grow slowly but steadily, luring white-tailed deer from their pro-

tected haunts in the woods. The does won't bear their fawns until warmer weather arrives, but even nibbles of nutritious grass help to sustain them and other herbivores in this "hungry time" of the year.

Behind these off-and-on spurts of growth lie the advance and retreat of great masses of cold and warm air. It's a battle. Frost, ice, sleet, snow, and numbing cold flow south from great reservoirs in the Arctic and Canada, or sweep west from the Atlantic coast (a "back-door front"). When they reach Kenney Ridge, they may have warmed just enough to become a miserably cold rain. Clear, windy, and piercingly cold days follow, slowly warming as the front looses force. Soon enough, the first wisps of clouds appear and the humidity begins to rise. Clouds move in from the south, thicken, and soon it's raining again as a warm front pushes up from the Gulf Coast. Rumbling thunderstorms and sizzling lightning may pound the earth. When the front pushes through, the days are clear and warm, almost hot, until the cycle begins again.

The end of February brought one such storm to Kenney Ridge, tearing branches from trees and flinging marble-sized hail at the earth. At that, the Ridge was lucky. A little to the west, golf-ball- and even softball -sized hail crashed down. Imagine the forces that toss bits of ice up and down in the storm clouds, keeping them aloft long enough to grow so large.

Two celestial forces lie behind the slow journey toward spring. Since the winter solstice in December, the northern hemisphere of the Earth has been tilting slowly back toward the sun. At the same time, the elliptical path of the Earth brings it closer to that great orb. More heat, for a little longer time each day, reaches the surface of our planet. Soil warms; the rains replenish moisture; days are a little longer and nights a little shorter.

Chickasaw Plum

Over the billions of years that life has existed on Earth, exquisite adaptations have allowed organisms to take advantage of such changes. Increasing light and warmth trigger hormonal and other biochemical responses in plants and animals alike. In plants, the results are growth and in time, flowering and the setting of fruit or seeds. Chickasaw plum thickets on the Warrick-Thomas lot bloomed by the end of February (above), before leaves emerged. On the meadow, leaf and flower buds of wild pear trees began to unfold simultaneously (below). Other trees and plants will not flower until they are fully in leaf.

Wild Pear

Animals respond in a variety of ways to the seasonal changes of late Winter and early Spring. Their reproduction is affected: many mammals court, mate, and their young begin to develop internally. Others mated in the Fall and will soon bear young. Snakes and lizards lay eggs; amphibians seek the opposite sex, often very vocally. By the end of February, for example, frogs were singing in the Stipe-Maas' temporary pond. Their gelatinous egg masses will develop quickly into tadpoles, barring a hard freeze or untimely drying of their watery homes.

Most visible of all, perhaps, are changes in the appearance and behavior of birds. Flocks of Robins passed through the Ridge early this month, harbingers of the great Spring migrations of many species. What causes birds to migrate and keeps them on course is not fully understood, but the results will be increasingly visible in March and April. Many birds that spent the Winter here also will begin to move north soon.

Some year-round avian residents are preparing to breed. Male Goldfinches show the first subtle changes from drab olive feathers to brilliant yellow courting plumage, although they will not mate until later in the Spring. Male Cardinals, flaming red against bare branches, sing vigorously in the early morning and attack their reflections in cars' side mirrors. An Eastern Phoebe checks out last year's nest but apparently finds it lacking. It's not here yet, but Spring is coming!

March 5, 2005
Layout: Dave Lindsay
Text: Suzanne Lindsay
Photos: Dave Lindsay