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BRINGING BACK BIRDS
FOR AUGUST, AGASTACHES
GRAND RAPIDS' NEW CONSERVATORY
GAULTHERIAS FOR FALL



Avian Gardener

He applied all his professional skills to his home landscape. Then he realized: it was sterile.

B Y R I C H A R D D E V I N E

One of my earliest encounters with birds was a memorable, though not so pleasant, experience as a boy of 10 or so. I was wandering the woods near my home when I noticed a nest high in an oak tree. Anxious to see what

was in it, I started to climb. About halfway up I felt a sharp pain on the top of my head. Before I was sure of the cause, the furious mother blue jay struck me again. I half jumped, half fell back to the base of the tree where I sat rubbing my head, watching the angry bird fly back to its nest.

Growing up on Long Island, I witnessed those woods slowly disappear as development progressed, and it became increasingly difficult to watch birds in their natural surroundings.

"Progress" has become synonymous with the destruction of native habitats, such as that of the scrub jay where I now live in Florida. The scrub jay is endemic to the scrub habitats of the Lake Wales Ridge, a strip of high, well-drained sandy soil that runs down the center of the Florida peninsula. Unfortunately, this land is highly prized by humans, both for homes and citrus groves. Only 10 percent of the scrub remains, and the scrub jay has been brought nearly to the brink of extinction. Likewise, the loss of North American forests to development is thought to be the reason for the three percent decline in songbirds since the 1970s.

One way to protect our ecosystems is to incorporate them into our developments, from 50-acre subdivisions to quarter-acre lots, leaving natural corridors



RICHARD DEVINE

Opposite: Pileated woodpeckers are shy birds that seek the privacy of deep woods. Above: Birds appreciate a water source, like this basin the author formed from leftover concrete. He and his wife planted around this fallen turkey oak to create an enriched habitat for woodpeckers and chickadees.

DOING THE BAT STROKE?

Among the winged creatures attracted to Richard Devine's yard are bats, which skim along the surface of his swimming pool. The experience isn't an unusual one, according to Heidi Hughes, education director of the Rockville, Maryland-based American Bat Conservation Society. "I got a frantic call from the Rockville Swim Club last year saying that an orange bat was attacking everyone in the pool. They said, 'We're sure it's rabid and we got everyone out.'"

Hughes said that most bat species, including the red bat that had frightened the swimmers, get their drinking water "on the fly," and a lap-length pool is ideal. "It's really a wonder that more of them don't drown, and sometimes the baby bats, who are just learning to fly, do." They are not harmed by chlorine, which most of us consume in municipal drinking water, she noted.

Baby bats in particular are unlikely to be frightened away by the presence of humans, Hughes went on, and in fact have reason to be drawn to a populated pool. "The carbon dioxide we're exhaling draws mosquitos and gnats and the bats go after the bugs."

So the bat disrupting your pool party could be thirsty or hungry or both. But one thing you can be absolutely sure of is that it isn't rabid. "When bats are sick," emphasized Hughes, "they can't fly."

—Kathleen Fisher, Editor

not only for birds but for other forms of wildlife. Of critical importance to neotropical songbirds is almost unbroken forest between their breeding grounds in North America and their wintering grounds, primarily in Central America.

Two ways to provide such habitat are to clear no more space than we must when developing, and to replace as much of the denuded landscape as possible with native trees, shrubs, and forbs. I've been involved in both. As head gardener of an estate in north central Florida, I work with wooded natural areas; at home, I've begun to restore vegetation lost to development.

The estate where I work is a 5,000-acre thoroughbred horse farm nestled in what remains of the vast upland forests that covered the southeastern coastal plain. It's a transition zone of moisture-retentive sandy-loamy soils, where northern deciduous hardwoods and subtropical evergreens compete for dominance. Here canopy trees such as pignut hickories, white ashes, and shumard's red oaks vie for headroom with southern magnolias, cabbage palms, and magnificent 200-year-old live oaks. The understory is filled with dogwoods, redbuds, hornbeams, and ironwoods, while coontie (*Zamia* spp.), bluestem palmetto, and partridgeberry fill ground-level spaces. From a horticultural point of view, the area is unique, offering the opportunity to grow temperate and subtropical plants side by side.

Surrounding the farm is a crazy quilt of habitats—freshwater ponds, hydric hammocks, pine flatwoods, scrub and sandhill communities, with abrupt changes from xeric to hydric conditions. Pine flatwoods

are probably the most common terrestrial ecosystem in Florida, surrounding and merging with all other ecosystems. It's flat, well-drained terrain, composed largely of longleaf and slash pine over an understory layer of saw palmetto, gallberry (*Ilex glabra*), dwarf huckleberry, and tarflower (*Befaria racemosa*).

Hydric hammocks—a type of wet temperate forest—are for me the most interesting. In our area, they contain a rich mix of evergreen and deciduous trees and shrubs over a ground cover of temperate and tropic ferns. Hammocks can be found in moist bottomlands between higher and drier sandhill and scrub communities. These latter two ecosystems have similar soils. But sandhill areas are characterized by deciduous oaks, longleaf pines, and grasses in an open woodland, while scrub habitats are dominated by a dense mix of evergreen oaks over mostly bare sand.

The forest on the farm is fragmented, but much remains intact around rolling pastures grazed by cattle and race horses. Little touched except for a few winding paths, its old-growth character is evident in the regular appearance of pileated woodpeckers, shy birds that prefer the cover of deep woods. During wet summers, storm runoff creates small streams that wind through the hammocks past American hollies, sweetbay magnolias, and loblolly bays, disappearing underground in places and emerging again before spilling into isolated ponds formed from age-old sinkholes.

While exploring one of these ponds, I came across the endangered ladies'-tresses orchid, *Spiranthes praecox*, with its tiny

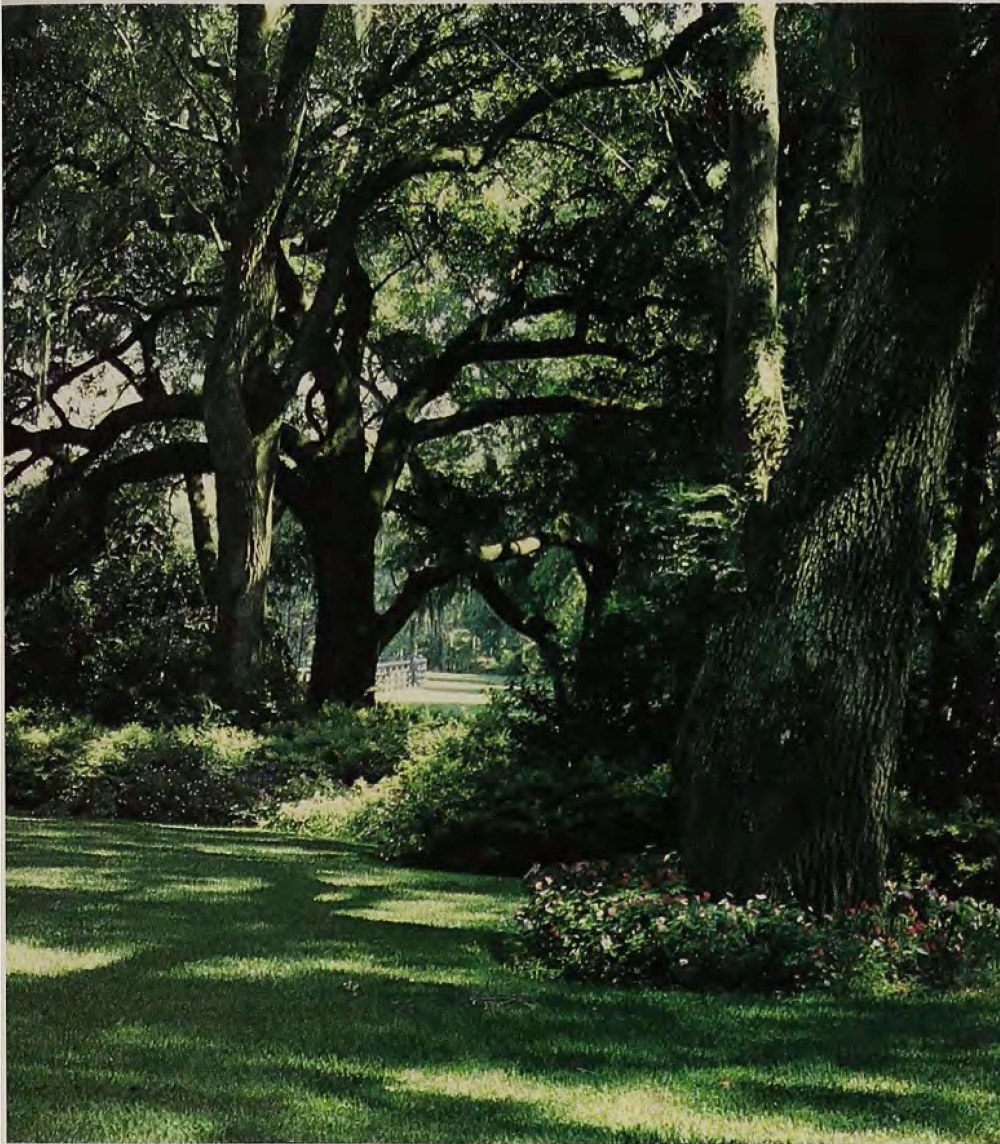


RICHARD DEVINE

white flowers spiraling up a stem eight to 12 inches long. On another trek, I found a clearing filled with lush swamp fern (*Blechnum serrulatum*) and Jack-in-the-pulpit (*Arisaema triphyllum*).

My home, by contrast, is in a residential development not far from the Gulf of Mexico, on land that once formed a sandhill habitat. It is flat, sandy, somewhat xeric terrain, with a canopy of slash and longleaf pines towering above an understory of mixed evergreen and deciduous oaks. Natural sandhill ground cover consists mostly of wiregrass (*Aristida stricta*), but with the suppression of fires, this has thinned and oaks have taken over.

Our half-acre was entirely cleared by the builder, so little of the native vegetation remained when my wife and I moved in 15 years ago. To make matters worse, my idea of landscaping at that time conformed to



the traditional principles of neat clipped hedges, exotic plants, and lots of grass.

Then I realized that not only was I discouraging birds and other animals from returning—the opposite of my intent—but I was creating a lot of unnecessary work for myself. The gardens may have looked attractive, but they were sterile.

When I was hired more than 17 years ago to develop and maintain the grounds of the estate, I was allowed a great deal of freedom. The owners provided only broad direction, seeking above all to preserve as much of the natural surroundings as possible. The details were left to me. They encouraged experimentation and were understanding and remarkably tolerant of the many mistakes I made along the way.

Searching for a solution to my personal landscape dilemma, I began to note the examples before me every day—the natu-

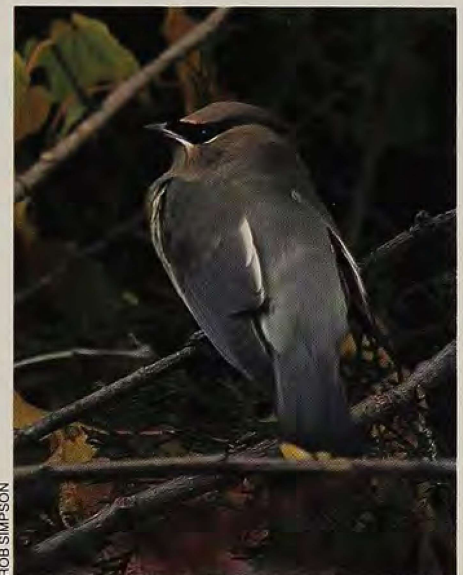
The grounds of the estate where the author works, above, merge gradually from managed beds to natural woods. The red-winged blackbird, top right, is a year-round Florida resident, while the cedar waxwing, bottom right, is a “snowbird” that winters there and flies north in spring. Understory plants in the north Florida woods range from temperate trees like dogwood and redbud to subtropicals like coontie, middle right.



VALORIE HODGSON: PHOTO/NATS



ANITA SABARESE



ROB SIMPSON

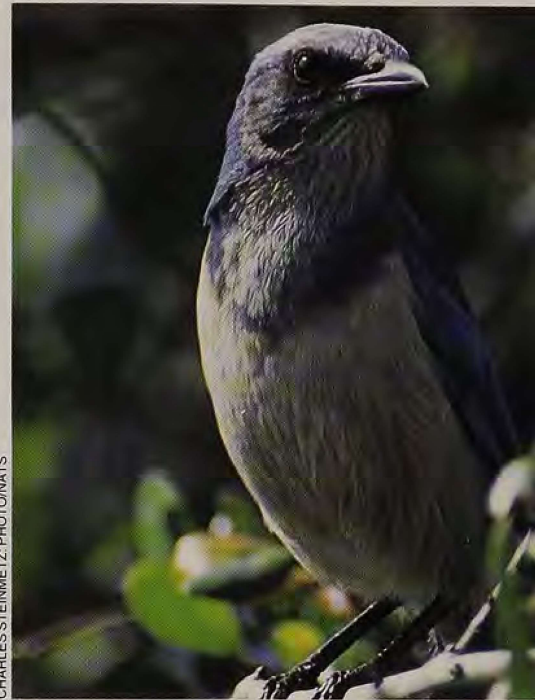
FRIENDLY NATIVES

Richard Devine is luckier than most of us in having a 5,000-acre “garden.” Most of the estate on which he works has been left natural. Here is a short list of the American native plants occurring on or introduced to the property.

Botanical Name	Common Name	Native Range
Herbaceous Ornamentals		
<i>Blechnum serrulatum</i>	Swamp fern	Continent-wide
<i>Coreopsis gladiata</i>	Glades coreopsis	Deep South
<i>Crinum americanum</i>	Crinum lily	Gulf states
<i>Liatris chapmanii</i>	Blazing-star	Florida
<i>Muhlenbergia capillaris</i>	Muhly grass	Southeast, South-Central
<i>Penstemon multiflorus</i>	Beard-tongue	Georgia, Florida
<i>Phlox divaricata</i>	Woodland phlox	East of the Mississippi
<i>Ruellia caroliniensis</i>	Wild petunia	Mid-Atlantic, Southeast
<i>Salvia coccinea</i>	Tropical sage	Southeast, Texas
<i>Solidago odora</i> var. <i>chapmanii</i>	Goldenrod	Georgia, Florida
<i>Spartina bakeri</i>	Sand cordgrass	South Carolina to Florida
<i>Spigelia marilandica</i>	Indian pink	Southeast, Gulf states
<i>Stokesia laevis</i>	Stoke's aster	Southeast
<i>Woodwardia areolata</i>	Netted chain fern	East Coast, Gulf states
<i>Yucca filamentosa</i>	Beargrass	Southeast, Gulf states
Shrubs		
<i>Befaria racemosa</i>	Tarflower	Georgia, Florida
<i>Calycanthus floridus</i>	Sweet shrub	Southeast
<i>Ceanothus americanus</i>	New Jersey tea	East, Midwest
<i>Hibiscus coccineus</i>	Scarlet hibiscus	Georgia, Florida
<i>Ilex vomitoria</i>	Yaupon holly	Mid-Atlantic, Southeast
<i>Itea virginica</i>	Virginia willow	Mid-Atlantic, Southeast
<i>Leucothoe axillaris</i>	Doghobble	Mid-Atlantic, Southeast
<i>Myrica cerifera</i>	Wax myrtle	Coastal—Maryland to Texas
<i>Rhododendron austrinum</i>	Flame azalea	Georgia to Mississippi
<i>Vaccinium darrowi</i>	Blueberry	Deep South
<i>Viburnum obovatum</i>	Walter's viburnum	Deep South
Trees		
<i>Celtis laevigata</i>	Hackberry	Southeast
<i>Cercis canadensis</i>	Redbud	Mid-Atlantic, Southeast, Texas
<i>Chionanthus virginica</i>	Fringe tree	Mid-Atlantic, Southeast, Texas
<i>Cyrilla racemiflora</i>	Titi	Southeast
<i>Magnolia grandiflora</i>	Southern magnolia	Southeast, Texas
<i>Serenoa repens</i>	Saw palmetto	Deep South, Gulf states
<i>Styrax americanus</i>	Storax	Southeast

ral beauty and simplicity of the farm's wild areas—and those observations gradually transformed my view of the function of landscaping. I realized it wasn't enough just to fill a site with beautiful plants arranged in some artistic pattern.

Literature searches uncovered sources for further ideas. I found support in books like *Bold Romantic Gardens* by Wolfgang Oehme, James van Sweden, and Susan Rademacher Frey, *The Natural Garden* and *The Natural Shade Garden* by Ken



CHARLES STEINMETZ/PHOTONATS

Druse, and *Gardening With Native Wild Flowers* by Samuel B. Jones and Leonard E. Foote. I joined the Nature Conservancy, the American Forestry Association, and the National Wildflower Research Center. My library swelled as I bought reference manuals on native plants of my region.

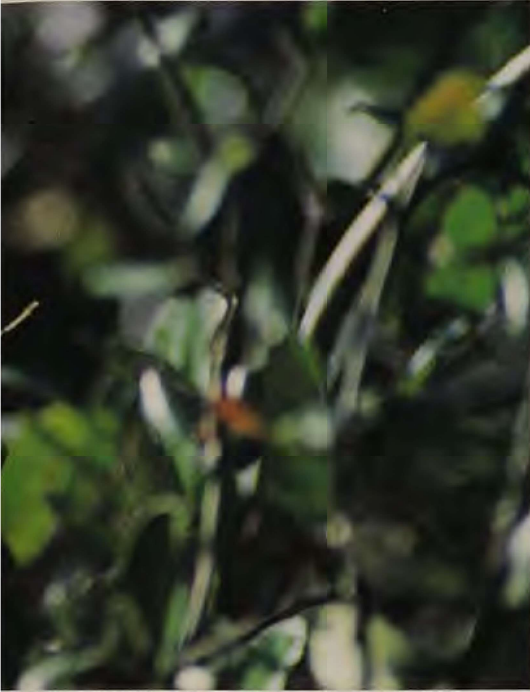
Thus redirected and a bit more knowledgeable, I was ready to take the first step in attracting birds back to my yard—identifying birds that appear naturally in the area. Some, like cardinals, bluebirds, nuthatches, and red-winged blackbirds, are Florida residents, moving very little in the course of a year. Others, such as white-throated sparrows and blue grosbeaks, are migratory, just refueling here on their long journeys north and south. Goldfinches, cedar waxwings, purple finches, and other “snowbirds” winter here and return north in spring, while others that spend the winter in Central and South America take up residence here in the summer.

The next step—providing the right plants to accommodate the birds—was a bit more complex. I knew I had to begin with an inventory of the existing vegetation, but I was still unfamiliar with many of the native plants. I was helped with that through membership in the Florida Native Plant Society and their annual field trips. One such trip last spring was to one of the last remaining scrub habitats in south central Florida. There I learned from researchers at the Archbold Biological Station in Lake Placid about the scrub jay's depen-

USEFUL IMMIGRANTS

There is currently a great deal of handwringing over the notion that the enthusiasm for natives has gone too far. But all evidence indicates that the purists among American gardeners are few in number. As Richard Devine says on page 24, he will frequently choose an exotic for an intensively managed bed if it meets aesthetic requirements and performs well under existing conditions. In Florida, that can include subtropicals—"house plants" for the rest of us. Here are a few of the exotics he incorporates with natives and their countries of origin.

<i>Botanical Name</i>	<i>Common Name</i>	<i>Origin</i>
Herbaceous Ornamentals		
<i>Agapanthus africanus</i>	Lily-of-the-Nile	South Africa
<i>Asparagus sprengeri</i>	Asparagus fern	South Africa
<i>Begonia coccinea</i>	Angel-wing begonia	Brazil
<i>Clivia miniata</i>	Kaffir lily	South Africa
<i>Cortaderia selloana</i>	Pampas grass	Argentina
<i>Crocosmia 'Lucifer'</i>	Montbretia	South Africa
<i>Cuphea hyssopifolia</i>	Mexican heather	Mexico
<i>Dietes bicolor, D. vegeta</i>	African iris	South Africa
<i>Eucharis amazonica</i>	Amazon lily	Colombia
<i>Hedera helix</i>	English ivy	Eurasia
<i>Hosta plantaginea</i>	Hosta	China, Japan
<i>Liriope muscari</i>	Monkey grass	China, Japan
<i>Maranta leuconeura</i>	Prayer plant	Brazil
<i>Miscanthus sinensis</i>	Zebra grass	East Asia
<i>Ophiopogon japonicus</i>	Mondo grass	Japan
<i>Pachysandra terminalis</i>	Japanese spurge	Japan
<i>Pennisetum setaceum</i>	Fountain grass	Africa
<i>Phaius tankervilliae</i>	Nun's orchid	Himalayas
<i>Plumbago capensis</i>	Plumbago	South Africa
<i>Salvia leucantha 'Emerald'</i>	Mexican bush salvia	Mexico
<i>Spathiphyllum</i> spp.	Spathe flower	South America
Trees and Shrubs		
<i>Abelia grandiflora</i>	Glossy abelia	China
<i>Camellia sasanqua</i>	Japanese camellia	Japan
<i>Hydrangea macrophylla</i>	French hydrangea	Japan
<i>Magnolia soulangiana</i>	Saucer magnolia	China
<i>Pittosporum tobira</i>	Japanese pittosporum	China, Japan
<i>Raphiolepis indica</i>	Indian hawthorne	South China



The scrub jay, native to central Florida, has been brought nearly to extinction by development.

dence on fire. Fires started by lightning, it appears, prevent vegetative succession, which allows the birds to move about and rear their young but still find protection from predators.

As I developed a sense of the plant communities that existed here for thousands of years, I began to see what I needed to do to preserve habitat on the farm. And the attention I paid to preserving and enhancing the farm grounds helped me start transforming my home landscape.

About nine years ago, when I was still a traditional landscaper, my wife and I planted some Leyland cypresses (*Cupressocyparis leylandii*) along our back border for privacy. By now most are 12 to 15 feet high and six to eight feet wide. Though not native, they have proven to be an asset, since birds, especially cardinals and blue jays, love to hide among the branches. The rest of the border was filled with exotic shrubs such as Formosa azaleas, pyracantha, ligustrum, and junipers.

I could have ripped out all the exotics and replaced them with native plants, but that would have been costly and time-consuming. I wasn't trying to restore the original conditions, which would have been impossible anyway. Since we still had a lot of lawn, I decided that most of it could be replaced with enough natives to make birds

feel at home. Fortunately, my yard still had some native trees left. Scattered about were an American elm, a few dogwoods, a red-bud, a couple of slash pines (*Pinus elliotii*), a *Magnolia grandiflora*, and a laurel oak (*Quercus hemisphaerica*).

I had more freedom to use exotics at the farm because they formed a relatively minor part of the overall plant palette. The landscaping grades from informal but highly structured to completely natural. A lawn, which winds and flows for several hundred feet in connecting the main buildings, surrounds a number of planting beds and is itself surrounded by semi-natural woodlands filled with more than a thousand Formosa azaleas. Farther out, the

ATTRACTING HUMMERS

Two years ago I planted a bed of tropical sage (*Salvia coccinea*) outside my office, and many mornings as I arrive I'm greeted by one or more hummingbirds searching each flower for nectar.

While it's true that hummers prefer large solitary flowers with long floral tubes and are especially drawn to highly visible reds and oranges, they're also attracted to flowers that

break one or both of these rules. Every once in a while we see them flying from flower to flower in the rose garden. They even get into the greenhouses and fly up and down the aisles, searching for good nectar sources among the hanging baskets of impatiens, begonias, and bougainvilleas.

Seeing how hummers were attracted to *Salvia* at the farm, last year I scattered both tropical and autumn sage (*S. greggii*) throughout my more xeric sections, which are beginning to receive visits from ruby throats.

Other good hummingbird plants for us have been buckeye (*Aesculus* spp.), columbine (*Aquilegia* spp.), honeysuckle (*Lonicera* spp.), penstemon, and lobelia.

Lonicera sempervirens can be found growing wild along fence rows and roadsides. We planted a few to cover a dying tree stump near the edge of our property and they bloom almost year round if the weather is warm.

Penstemon multiflorus is an abundant native with erect stems and 15 to 25 white to light pink flowers in late spring or early summer. They're easy to germinate, so I've collected seed during field trips and propagated thousands, giving some to a teacher for his native plant nursery at school, others to a nearby state wildlife park, and setting the rest out both at the farm and at home. They're great for dry areas.

Lobelia cardinalis is the quintessential hummingbird plant, with 70 or 80 bright red flowers on stems to three feet high. Be sure to buy plants grown locally. A few years ago I bought seeds from out-of-state, and while they germinated, the plants never grew well or flowered. I've since purchased plants propagated from local sources and had much better luck.

—Richard Devine



A ruby-throated hummingbird sips from a fire pink (*Silene virginica*).

woodland becomes completely natural.

The more intensively managed beds are filled with what functions best. I first look for natives to fill the slot, but if I can't find the right one I use exotics that satisfy the aesthetic requirements while performing well under the same conditions. (See sidebar, page 23.) Less intensively managed areas contain more native plants, and the proportion increases until only natives are allowed in the outlying areas.

This gradual transition, along with the continuous canopy of live oaks and the irregular shape of the lawn, gives the whole property a natural look. Birds are ever present. In addition to the pileated woodpeckers, red shouldered hawks and great horned owls make regular appearances. In less inhabited parts of the farm, we see nesting bald eagles.

Although the farm and my home have

different natural plant communities, many of the same plants, such as slash pines, can be grown in each. Upland trees such as American elm (*Ulmus americana*), winged elm (*Ulmus alata*), ironwood (*Carpinus caroliniana*), and hackberry (*Celtis laevigata*)—which self sows with such determination at the farm we've even found it growing in an asphalt driveway—do well once established in sandhill areas. American beautyberry (*Callicarpa americana*), which springs up all over the farm's woodlands, is a prime source of winter food for mockingbirds, cardinals, wood thrushes, and robins. It's just as much at home on my xeric sandhill ground. So in many cases, I'm able to enrich my home grounds with plants started from seeds and cuttings and unwelcome volunteers from the farm.

My library research and my bird-watching at the farm convinced me I could supply food for birds at home almost year round with a variety of trees, shrubs, and flowers. Here is where natives really shine: our birds have evolved with them and know their cycles. I do set out some supplemental feeders, but I don't want the birds to rely on them since I know I'll sometimes forget to fill them, especially in bad weather.

When I look for food plants, I try to find candidates that will be useful in more than one season. Tulip trees (*Liriodendron tulipifera*), though not a prime food source for birds, do supply nectar to hummingbirds in the spring, and evening grosbeaks eat the seeds that develop later in the fall. The red cedar not only attracts warblers and finches, but adds some green to our usually drab winter garden.

Another attractive evergreen, a ground cover, is wild coffee (*Psychotria nervosa*). It can grow to four feet in a garden, but I haven't seen it over two feet in the woods. It has shiny dark green leaves with impressed veins, a profusion of tiny white flowers in spring and summer, and a myriad of bright red berries that begin coloring in October; cardinals and blue jays love them. I've been rooting cuttings at home to use under trees and shrubs.

Pines and oaks are important food sources for birds. Most of our longleaf pines, once dominant from southern New Jersey along the coast to east Texas, have been harvested for timber. But there are still extensive stands of slash pines almost to the southern tip of Florida. Abundant at the farm are live oak (*Quercus virginiana*), water oak (*Q. nigra*), and laurel oak. At home the dominant oaks are turkey (*Q.*



ROB SIMPSON



ROB AND MELISSA SIMPSON



JESSIE M. HARRIS



RICHARD DEVINE

laevis), bluejack (*Q. incana*), and sand live oak (*Q. geminata*).

Wildflowers allowed to go to seed are also good sources of fall and winter food for ground feeders like doves, quail, buntings, finches, and juncos. In a problem area at the farm once used as a vegetable garden and later as a lawn, we began some plantings of wildflowers a couple of years ago. They've worked out so well we've expanded the area into a roughly kidney-shaped meadow garden of almost 700 square feet. The garden begins to look a little unruly by November, when the last black-eyed Susan (*Rudbeckia fulgida*) has faded, but we try to leave the spent flower heads on as long as possible so the birds can pick through them for seeds. Before we cut everything down, I collect any leftover seeds to propagate. At home I plant these wildflower seedlings mostly as fillers be-

Birds like the brown thrasher, top, and the Carolina wren, left, like the protection of dense undergrowth where they can forage through leaf litter. In the undisturbed woods of his employer's estate the author has found rare plants like the endangered ladies'-tresses orchid, above. Wrens have built nests on the bookshelves in his office, right.

tween shrubs, where they add seasonal color and increase the fall food supply.

Cardinals love sunflower seeds, so we leave the plants scattered in the perennial garden when they've finished blooming. Indian blanket (*Gaillardia pulchella*), another good seed source, can look a little ratty when it dies back in fall, so we mix it with perennials like goldenrod (*Solidago nemoralis* and *S. odora* var. *chapmanii*), silk grass (*Pityopsis graminifolia*), or spiderwort (*Tradescantia ohioensis*) that will hide it when it hits the unkempt stage.

An appreciation of this messy look, like that for fine wine, is an acquired taste, and my wife is less tolerant of it than I am. We compromise by limiting it to outlying areas that I clean up in early winter.

Birds don't like prim and proper yards. The more plants, the better. When native trees and shrubs are planted thickly to-



RICHARD DEVINE

This pond, formerly used to exercise race horses, is now home to swans, ducks, and geese.

gether they draw insects, which in turn bring birds that eat them—often cavity-dwellers like woodpeckers, flickers, and martins. Carolina wrens and brown thrashers like dense undergrowth with lots of leaf litter for foraging.

At the farm we've noticed that many birds prefer to hunt for food under the large expanses of saw palmettos (*Serenoa repens*). The palms offer year-round protection from the elements and predators, allowing the birds to search for food among the fallen pine needles that form a natural mulch. These dense plantings also provide shelter and nesting spots.

Plants should be mixed to create a rich variety of canopy, understory, and ground cover. On the back of my property, I've been experimenting with some passion vines (*Passiflora incarnata*), allowing them to grow as they please on the Leyland cypresses. As a larval food for Gulf fritillaries, they not only encourage those butterflies to take up residence, but attract insect-feeding birds as well. The beautiful four-inch blue flowers are a bonus.

Not all birds are particular about their nesting requirements. I've watched Carolina wrens build nests on the bookshelves in my office or in hanging baskets on the back porch. But cavity nesters, such as woodpeckers, nuthatches, screech owls, and bluebirds, need fence posts or dead or dying trees. Bluebird populations in the eastern United States have declined nearly 90 percent over the past 50 years, in part because so much of our forests have been supplanted by "yards," whose owners zealously clear them of dead trees.

When a March 1993 storm blew down a turkey oak in our yard, we realized after much consternation about how to get rid of it that it would make a perfect addition to our wild garden. We cut it into a few large but picturesque sections, maneuvered them to a spot near the edge of the property, and planted around them. Now we have an enriched habitat for chickadees and red-headed woodpeckers.

Water is also an important part of a bird habitat. It offers a refreshing break for migrants and locals alike. Orioles like to nest near water, and running water is especially attractive to eastern phoebes and great crested flycatchers.

On the farm, in addition to the wet-season streams, are numerous hammocks and ponds. Some of the ponds are deep in the woods and filled with vegetation, while others are out in the open. Near the green-

house is one of the latter, a former exercise pond for race horses, some 500 feet across and 10 to 12 feet deep. I plan to surround it with fresh water plants to give more cover to the ducks, geese, and swans that now call it home.

You don't need anything this immense. Blue jays appreciate a shallow basin I made out of leftover concrete and placed near the fallen tree in my yard. Just turning on sprinklers always draws birds.

Though it wasn't our intent, our swimming pool attracts another winged creature: for the past six or seven summers, about five bats have been visiting the pool around dusk, swooping down and skimming its surface, presumably picking up a much-needed drink or searching for insects (see sidebar, page 20).

Wingless creatures are also attracted to these enhanced habitats. A pocket gopher has disfigured sections of the farm's lawn with a myriad of little mounds. The piles are easily knocked down and spread out, however, so it's only a minor inconvenience. There's been a slight increase in the number of snakes sighted, but most are harmless and help keep the rodent population in check.

Thus I've gone from installing tidy beds of Asian perennials to creating passion flower bowers and welcoming snakes. But can all of these native plants and dead trees really make a difference? Will they save a threatened species, or merely encourage more adaptable opportunists to drop by?

As individuals, we can do little to save the dwindling population of songbirds as long as our woodlands continue to shrink in size. Many songbirds are inhabitants of the deep forests, and need large unbroken expanses to protect them from predators that search wood margins. To ensure their survival, we need large preserves linked by greenways, shelterbelts, and wildlife corridors.

But the back yards of individual homeowners can give safe haven to migratory birds and other wildlife and have the effect of widening such corridors. If each of us practices responsible stewardship and removes no more of the tree cover than is absolutely necessary, or adds back some of the native flora that have been lost, we can collectively help slow the slide of songbirds and other creatures into extinction. Our reward will be enjoying their sight and sounds far into the future.

Richard Devine is a former orchid grower who lives in Crystal River, Florida.