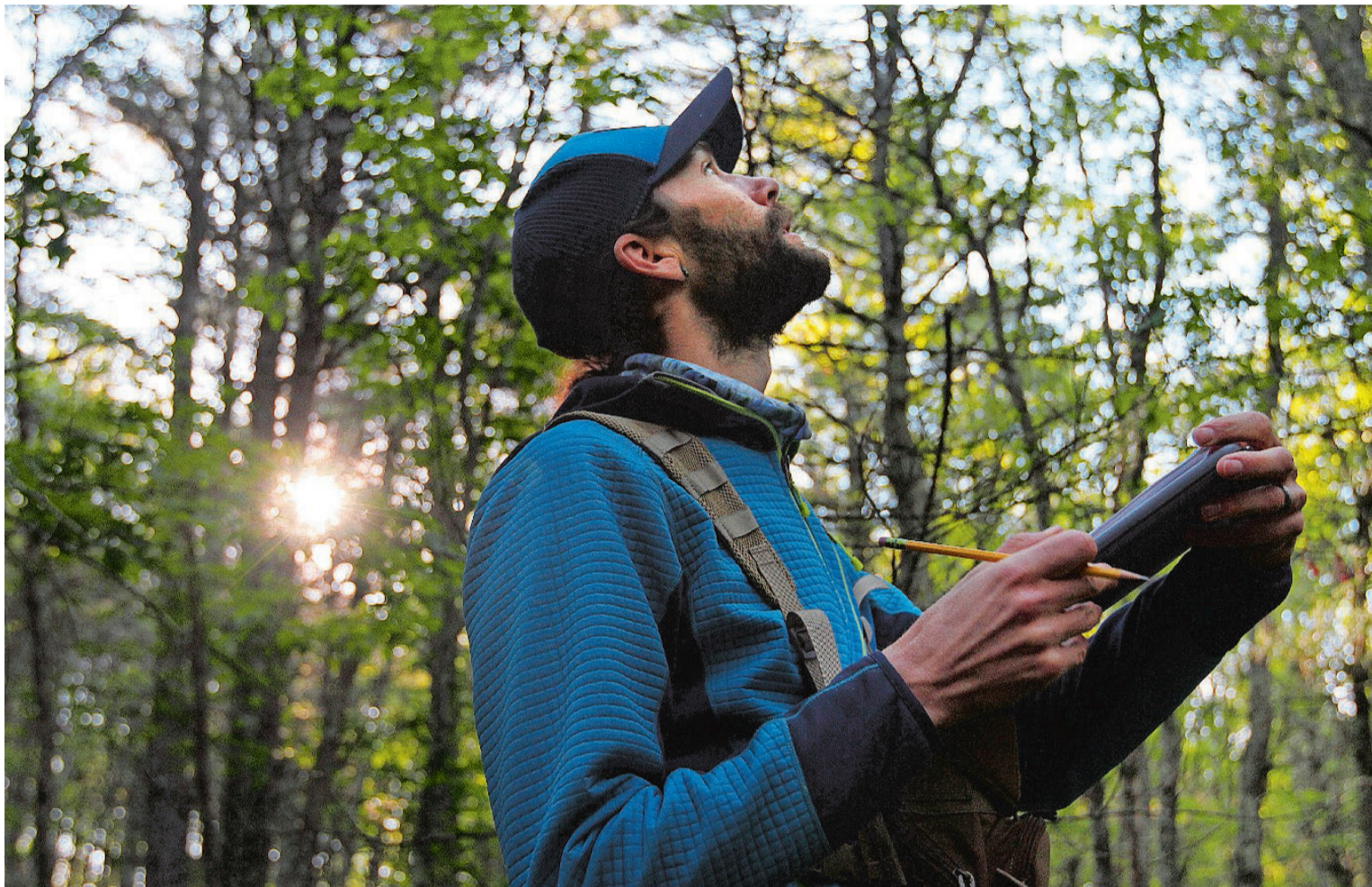


Where the birds are *(their tweets give them away)*



Ornithologist Charles Clarkson, coordinator of an ambitious volunteer-driven program to compile the second edition of the Rhode Island Bird Atlas for the Department of Environmental Management, goes birding in the Arcadia Management Area in Exeter. The first state bird atlas was assembled in the 1980s. The second edition is expected to be finished in 2020. At top, a Baltimore oriole takes flight in Barrington. [THE PROVIDENCE JOURNAL / BOB BREIDENBACH]

Big changes in R.I.'s first avian atlas since 1987

By Alex Kuffner
Journal Staff Writer

BARRINGTON — It's 5:24 a.m. at Brickyard Pond, and the dawn chorus is in full song.

The notes overlap and bleed into each other, a raucous jumble of tones, tempos and timbres. There are screeches and buzzes, chirps and rasps. Some are robust, others weak. Some are crisp, others slurred.

In the warmth of the rising sun, here in Block 62 of the first bird atlas to be

mapped in three decades in Rhode Island, the subjects are singing to remind their neighbors that they've survived the night, to restate their claims to their own little patches of the forest.

From the waves of sound crashing around him, ornithologist Charles Clarkson effortlessly picks out the songs of individual birds. Like a musician with perfect pitch, he surveys nature's singers with ears supremely attuned.

He hears the whistling melody of one

SEE BIRDS, A10



Suddenly, we're seeing these

The common raven, left, and bald eagle are among the birds gaining a foothold in Rhode Island. But species from the saltmarsh sparrow to the bobolink are in decline. Inside, we explore the changing profile of the state's birds. Pages A10-11

GOVERNMENT

Sessions to testify on Russia, election

It's not clear whether his testimony will be public or private

The Associated Press

WASHINGTON — Attorney General Jeff Sessions, whose contacts with Russia's ambassador to the U.S. during the presidential campaign have sparked questions, agreed Saturday to appear before



the Senate intelligence committee as it investigates alleged Russian meddling in the election. Sessions recused himself in March from a federal investigation into contacts between Russia and the presidential campaign of Donald Trump after acknowledging that he had met twice last year with the Russian ambassador to the

SEE SESSIONS, A3

Inside

What's next for Comey? Page A9

CULTURE

Across U.S., rallies show rising anger over Islam

Sharia protests draw even more counter-protestors

By Abigail Hauslohner and Justin Wm. Moyer
The Washington Post

NEW YORK CITY — Anti-Muslim activists hoisted American flags and delivered fiery speeches in rallies across the country Saturday, facing off against crowds of counter-demonstrators in several cities and exposing the visceral rage that has come to define America's political extremes.

ACT for America, a lobbyist organization with close ties to the Trump administration, organized nationwide marches to oppose Islamic law, which the group believes is a threat to American society.

The turnout was relatively small, with rally crowds of a few dozen in many cities outnumbered almost 10 to 1 by counter-demonstrators who tried to drown out their voices with drums, bullhorns and cowbells.

SEE ISLAM, A2

Mom leaves her island sanctuary

Almost 90, she knows she may never return

We sat together in her condo on the Florida Gulf Coast, my mom and I, awaiting the taxi that would take her to the airport — and back north. Until, she hoped, next season. She is almost 90 now, and



MARK PATINKIN

fragile, and it is important to her to hold onto that — the hope of returning. For more than 40

Decembers, this was where she'd come each year for its warmth and beauty, this coastal island called Sanibel.

The osprey had left months ago, and so had most of her snowbird friends. Now, as we waited, my mom admitted she'd lingered this year because she worried it could be her

SEE PATINKIN, A7



Providence Journal columnist Mark Patinkin and his mother, June, 89, in her condo on Sanibel, a Florida Gulf Coast island. [COURTESY OF MARK PATINKIN]

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Complete forecast, A8



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“Everything about them has been shaped over 160 million years of evolution not only to survive in a given environment but to thrive. They figured out the evolutionary puzzle. And in my opinion they’ve done it better than any other species on Earth.”

—Charles Clarkson, who is working with the Rhode Island DEM and the University of Rhode Island to update the state’s bird atlas for the first time in 30 years

BIRDS

From Page A1

Baltimore oriole and then another, tracking the sound to the trees overhead. He gestures to one side of the clearing, to the unmistakable trill of a pine warbler. He remarks on the distinctive “sneezing” song of a tiny American redstart coming from another tree.

“It has that ‘tweet, tweet, tweet’ with a little exclamation at the end,” Clarkson says.

Not only does he know the songs and calls, Clarkson can also tell if the birds are any good at making them. He turns to a tangle of scrub, where a song sparrow sings energetically but with little skill.

“What is that?” Clarkson says. “It sounds terrible.”

But Clarkson isn’t here to play critic. As coordinator of an encyclopedic five-year project to chronicle which species of birds are found in Rhode Island, and where and in what numbers, he is doing the painstaking field work that will eventually culminate in the second edition of the Rhode Island Bird Atlas.

Clarkson likes to describe atlas as “slow birding.” He isn’t trying to find unusual or beautiful species. He’s not trying to sight one bird and then move on quickly to check off the next one on a list.

Instead, the idea is to identify a bird and then back off and observe, looking for signs of breeding. Maybe the bird’s partner will show up. Maybe the bird will grab a beakful of grass to add to a nest. Maybe it will catch an insect to take back to its hatchlings.

It doesn’t matter if the bird is a graceful blue heron or a common ovenbird.

“We want to know everything,” Clarkson says.

Canaries in R.I.?

A bird atlas is not just about birds. It also tells us about the environment and how it’s changing.

Think of birds as indicators — canaries in the coal mine. When the conditions are right, an individual species thrives. And when they’re not, its numbers can plummet.

“What is the canary in the coal mine telling us about the health of Rhode Island ecosystems?” says Peter Paton, professor of wildlife ecology at the University of Rhode Island.

Paton is one of two directors of the atlas project. The other is Jay Osenkowski, deputy chief of the Rhode Island Department of Environmental Management’s Division of Fish and Wildlife. They, along with Clarkson, are overseeing 243 volunteers as part of the study.

The atlas divides the state into 165 geographic blocks, each 10 square miles. Volunteers are each assigned blocks that they must patrol in late spring as birds return north from their wintering grounds as far away as South America.

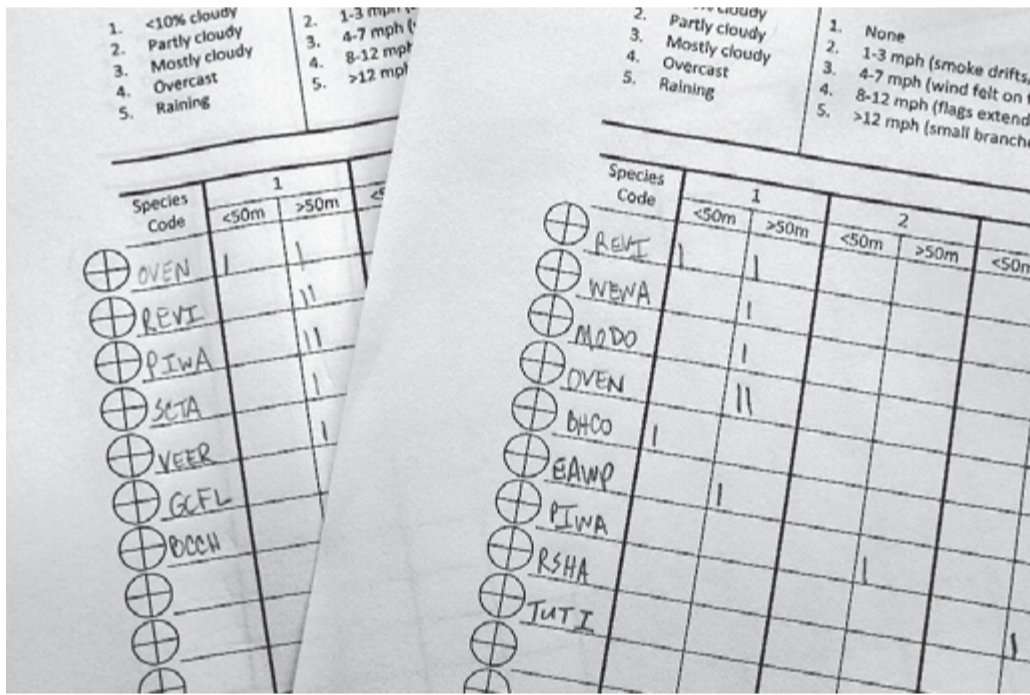
Although the volunteers record data on birds that migrate through Rhode Island and the ones that winter here, the focus of their work is the birds that stop in the state as the weather warms, building nests and raising young.

Since the first Rhode Island bird atlas was completed 30 years ago, the variety of breeding species has gone through noticeable changes.

Some go hand-in-hand with national trends. Bald eagles are one example. The nation’s iconic raptor has made a comeback across the country since the pesticide DDT was banned in the 1970s and the bird won protection under the Endangered Species Act.



Charles Clarkson takes an early morning walk through Veterans Memorial Park in Barrington as he works on the second edition of the Rhode Island Bird Atlas. So far, volunteers have documented 145 species around the state, down from the 164 found for the first atlas in the 1980s. For a video on the birds of Rhode Island, go to providencejournal.com. (THE PROVIDENCE JOURNAL PHOTOS / BOB BREIDENBACH)



Information sheets help volunteers working on the Rhode Island Bird Atlas document the variety of species they identify, along with the birds’ activities, such as breeding and nesting.

In Rhode Island, no eagles were recorded in the last atlas, but this time they’ve been found nesting in three blocks so far.

Common ravens were similarly nonexistent in the state 30 years ago. Highly intelligent and remarkably adaptable, the hawk-sized, coal-black birds are moving here from northern regions. Absent from the first atlas, now they’ve been documented in 10 blocks.

But the biggest growth story in Rhode Island’s bird world is the red-bellied woodpecker. It was found in only four blocks during the last atlas. This time, it’s been recorded in 60.

The woodpecker has proliferated in parallel with Rhode Island’s forests.

As the acreage cleared for agriculture has shrunk in the last 150 years, open fields have given way first to saplings and scrub and finally to mature forest, the preferred habitat of the red-bellied woodpecker, which nests in the hollows of trees, and other species in its family, such as the pileated woodpecker.

But with this shift, other species are losing out. While the northern bobwhite, a type of quail that inhabits grassy fields, was found in 55 blocks in the last atlas, none have been documented this time. The bobolink, another grasslands species, is also suffering.

As spring starts earlier, some birds are nesting sooner than in the past. The mute swan wouldn’t normally nest until mid-April, but they’ve been spotted nesting as early as February. The red-eyed vireo, an energetic songbird, is also



A female northern flicker near her nest at Veterans Memorial Park in Barrington. A female northern flicker near her nest at Veterans Memorial park in Barrington.

returning earlier from its winter feeding grounds in the Amazon.

Carolina wrens, which prefer warmer regions, are becoming more numerous as temperatures rise. But climate change is most clearly being felt by the saltmarsh sparrow, a species that’s losing numbers because it nests only in high-marsh plants that are drowning as seas rise.

On balance, more species appear to be in decline than on the rise. The first atlas documented 164 bird species in Rhode Island and an average of 56 species per block. The new atlas has recorded 145 species so far and an average of 48 per block.

Covering ground

Bird atlasing originated in England in the 1950s as a way of creating a baseline for future studies. The practice became standardized and quickly spread to other countries. Nearly a third of the Earth has been atlased to date.

The first Rhode Island

atlas was gathered from 1982 to 1987 through the work of 68 volunteers. The 206-page book, with black-and-white illustrations, is a basic collection of breeding maps for dozens of species.

Work on the Rhode Island Bird Atlas 2.0, which began last year and will conclude in 2020, will result in a document that may be three times as long and include satellite images, detailed comparisons of distribution and abundance and an online component.

Few scientific studies are as comprehensive. Volunteers must spend at least 20 hours in their assigned blocks over the five-year period, visiting during the day and the night. The goal is total coverage of the state and an assessment of all 15 habitat types that Rhode Island’s birds breed in, from coastal dunes to brackish swamps, from grassy pastures to mature woodlands.

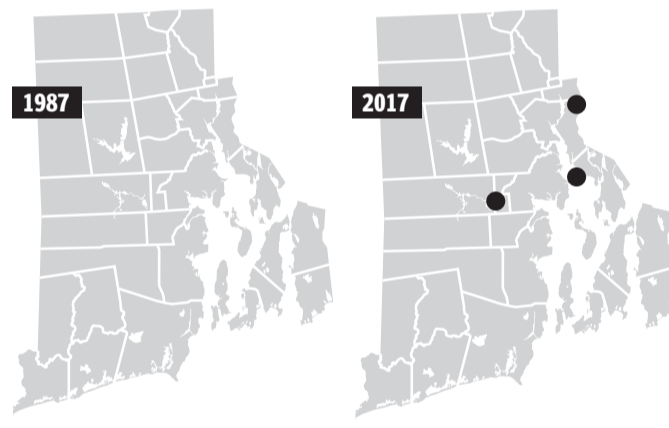
The work isn’t limited to natural areas, but must also cover the developed places that house sparrows,

Where they live

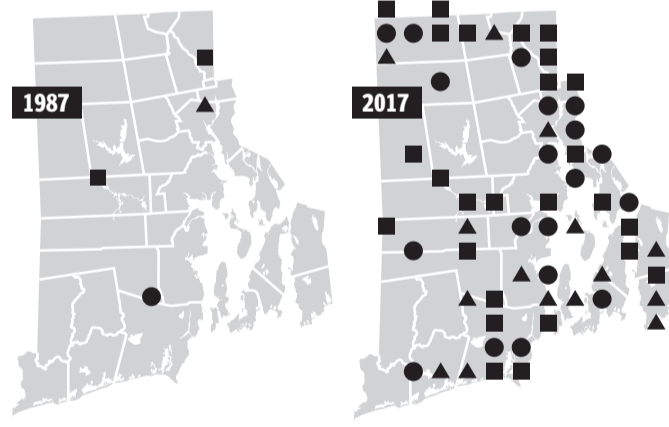
As more of Rhode Island’s farmland reverts to woodland, it becomes increasingly attractive to birds like eagles and woodpeckers and less inviting to field dwellers like quail.

● Confirmed nesting ■ Probably nesting ▲ Possibly nesting

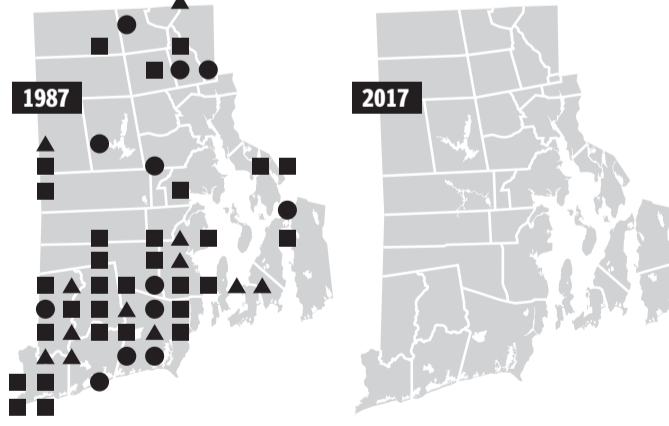
Bald Eagle



Red-bellied woodpecker



Northern bobwhite quail



SOURCE: Rhode Island DEM

THE PROVIDENCE JOURNAL/TOM MURPHY

starlings and other species have acclimated to.

“Don’t forget to check weedy areas, bridges, street signs, parking lots, old farm buildings and other ‘less than ideal’ breeding locations,” the atlas handbook reminds volunteers.

The Rhode Island atlas is unique in that it covers the entire state. Atlases in other states are based on geographic samples. In this go-round, the Rhode Island atlas is also tracking migration patterns and it has a winter component, making it the only year-round atlas in the United States.

The more coverage of the state, both geographic and

temporal, the less reliance on computer models to fill in the gaps, and the greater the accuracy.

“This has never been done before,” says Osenkowski. “No other state has been able to accomplish this.”

The atlas couldn’t be done without its corps of volunteers — people such as 67-year-old Deirdre Robinson, a retired professor of physical therapy at URI who went back to school to study birds and who has easily spent more than 100 hours prowling five blocks in the East Bay for the atlas.

“We’re all better birders

Atlas indeed

The effort
243 volunteers
The period
2016-2020
The grid
165 blocks across R.I., each 10 square miles
The product
A document of around 600 pages, including satellite images, detailed comparisons of bird distribution and density, and an online component.

Snapshot
More species appear to be dwindling than growing. The first Rhode Island Bird Atlas, 30 years ago, found 164 species in Rhode Island and an average of 56 species per block. The 2016-2020 atlas has so far recorded 145 species and an average of 48 per block.

Note: For comparison's sake, the first Rhode Island atlas included the work of 68 volunteers, ran from 1982-87 and culminated in a 206-page book with black-and-white maps and illustrations.



Charles Clarkson, who oversees nearly 250 volunteers detailing bird species in 165 10-square-mile blocks around the state, points out a bird to DEM Director Janet Coit while birding at Veterans Memorial Park in Barrington. [THE PROVIDENCE JOURNAL PHOTOS / BOB BREIDENBACH]

BIRDS

From Page A10

for having participated in this," she says. "But on a larger scale, we're contributing to conservation biology." Paton echoes that thought. Beyond the sheer legwork involved, the real benefit in putting birders to work is that it gives them a stake in writing a landmark study, turning them into citizen-scientists and harnessing their passion for all things avian.

In that sense, Clarkson, 36, rail-thin and invariably in hiking boots, is the perfect person to serve as coordinator. He holds a doctorate in ornithology, has taught at Roger Williams University and Salve Regina University, and leads birding trips to Panama, but still talks with wonder about an ordinary chickadee flitting around his backyard.

Among his 75 or so tattoos, Clarkson counts an archaeopteryx, the first bird, as well as an egret, an albatross and two species of antbird, specialists from Central America that have figured out one efficient way to get food is by following swarms of army ants through the rainforest as they flush other insects out into the open.

He describes birds as "metabolic hot-rods" that must constantly inhale calories to give them enough fuel to fly, maintain body temperatures that can top 100 degrees and keep hearts pumping at more than 1,000 beats a minute.

"Everything about them has been shaped over 160 million years of evolution not only to survive in a given environment but to thrive," Clarkson says. "They figured out the evolutionary puzzle. And in my opinion they've done it better than any other species on Earth."

Why bother?

When the atlas is completed, it won't just sit on a shelf somewhere. It will be used to evaluate development proposals. It will also help determine the most valuable habitats in the state and where the DEM, land trusts and nonprofits should focus their efforts to preserve land in more or less a natural state.

Those decisions won't be so clear-cut. There will be trade-offs. Is it worth cutting down a tract of forest to create "early successional habitat" that's perfect for a woodpecker but useless to a woodpecker?

There are also hard-to-answer questions about the appropriate mix of habitats and species for Rhode Island. Is it what's here now, what used to be here, or something

On the wing

Rhode Island's wild bird profile is changing. Some species are new to the state, but more are missing or in decline primarily due to changes in land use.

New to Rhode Island
Common raven, Bald eagle

Spreading
Carolina wren, Red-bellied woodpecker, Pileated woodpecker, Northern parula

Native but elusive
Cattle egret, Common gallinule, Sora, Green winged teal, American bittern, Gadwall, Monk parakeet, Upland sandpiper, Long-eared owl

In decline
Bobolink, Grasshopper sparrow, Eastern meadowlark, Horned lark

Gone from R.I.
Northern bobwhite quail

SOURCE: Rhode Island DEM

THE PROVIDENCE JOURNAL/TOM MURPHY

in between?

Since the 1630s, when the first Europeans came to what would become Rhode Island, the area's environment has gone through sweeping change. When the settlers arrived, 90 percent of the state was covered in forest. Within 250 years, three-quarters had been chopped down to clear space for farms and harvest wood for fuel and building materials.

But as agriculture gave way to industry in the 19th and early 20th centuries, abandoned farms became shrubland and then forest again.

And as the mix of habitats

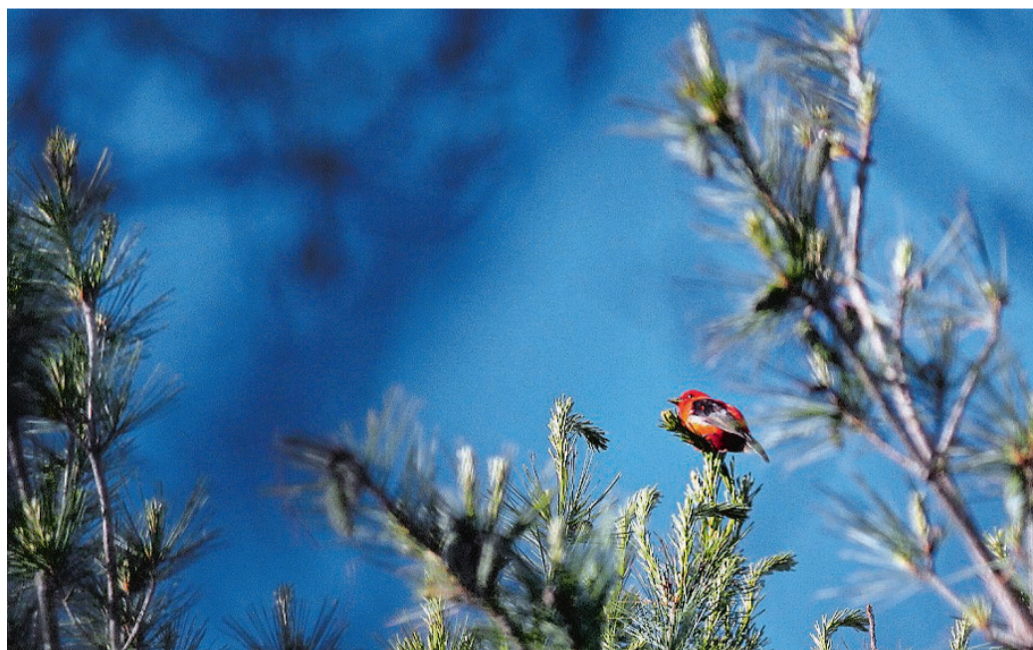
changed, so too did the variety and abundance of bird species.

Even though forest cover is greater now than it was during Colonial times, it's still nowhere near the historical peak. Since the 1960s, forestland has gradually been cleared for subdivisions and office parks, and the rate of clearing has picked up in the past two decades.

The bottom line is there's simply not as much natural habitat as there once was in Rhode Island, and what's left is fragmented. While the American robin and other species that can tolerate human disturbance are doing



A cardinal sings an early morning song at Veterans Memorial Park in Barrington. A bird's singing, in itself, can reveal a lot about the bird.



A scarlet tanager soaks up some early morning sun.

well, others are not.

It will probably take human intervention to save the saltmarsh sparrow, but there is precedent in the piping plover, a tiny shorebird that has seen its numbers in Rhode Island grow from 10 breeding pairs in the 1980s to the current 90 pairs through heroic efforts to protect its nesting areas on beaches.

"As humans dominate the landscape more and more, it takes intensive efforts to maintain these populations," Paton says.

And that type of work can only go so far. Eastern meadowlarks and other birds that need grasslands will probably never again be common in Rhode Island.

"Are we ever going to create enough habitat for them? Probably not," Osenkowski says.

In talking about the difficulty of making conservation decisions, Robinson says, "The issue is not one of sweet sentiment, but of intelligence." "Birds are beautiful and

awe-inspiring," Robinson says. "You can be quite sentimental about them. But in fact that is not the issue. The issue is about intelligence and doing the intelligent thing to protect them."

Coming full circle

After a couple of hours surveying the woods around Brickyard Pond, Clarkson is back where he started.

The two orioles are still hanging around the clearing, and a third has joined them. One perches on a high branch, its orange breast ablaze in the morning sun.

The song sparrow that Clarkson has dubbed "Mr. Not Very Good Singer" is still hopping around the brush at the edge of the pond.

There's a reason Clarkson commented on his song. The quality can shed light on the health and breeding ability of a bird. In this case, the song sparrow may be in his first year and still learning to hit the right notes.

Or the signal song may be a sign that neural development was impaired when the bird was a hatchling,

perhaps through malnutrition. Whatever the case, if the bird never perfects its song, it won't be able to attract a mate.

As Clarkson prepares to leave, a gray blur in the brush catches his eye.

"It's an Eastern kingbird with a whole lot of nesting material," he says.

The contents of the bird's beak offer clear confirmation that the kingbird isn't merely passing through, but is making a home in Barrington this summer. Clarkson makes a notation in his log.

Even for someone who studies birds as his life's work, a man who's made 16 trips to Panama to study them in the tropics, this is exciting. Not because the kingbird is uncommon or particularly interesting, but because Clarkson can add one more small piece to the sprawling puzzle of Rhode Island's second bird atlas.

"This is awesome," he says.

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