

WCUR-FM

Quarterly Issues/Programs List

July-September

The Federal Communications Commission requires every radio station to broadcast programming that responds to significant issues of concern to the community it serves, and to maintain a list of such issues and the programs that respond to them in the station's public inspection file.

The Executive Staff at WCUR receives significant numbers of requests to air University and community event announcements on a regular basis. Each week our Programming Director, compiles a list of University and West Chester Community events, which are broadcast during each student program. We average 12-16 University and local event announcements on a daily basis, fulfilling this community need.

Our mission at WCUR is broadcasting community news, weather, sports (WCU), and popular music giving our students the opportunity to manage and operate a broadcast radio station.

During the third quarter of 2023, WCUR aired the program "BirdNote Daily" regularly at 6 a.m., seven days a week. This two-minute radio program combines rich sounds with engaging stories to illustrate the beauty and mystery of nature through the fascinating lives of birds. By telling vivid, sound-rich stories about birds and the challenges they face, BirdNote Daily inspires listeners to care about the natural world— and take steps to protect it. BirdNote Daily is heard daily on over 250 radio stations in the United States, and WCUR is proud to be one of them as part of our ongoing commitment to serving our community and the world we share.

Issues addressed: Environmental concerns; climate change; ecosystems and biodiversity. Below are the dates of each broadcast, along with its title and a brief description.

7/1/23 Wetland Birds Thrive

While nearly a third of North American bird species are in decline, many birds that depend on wetlands are thriving. Duck breeding populations in 2009 were an estimated 25% above historical averages. Conditions on the breeding grounds have improved since the drought years of the 1980s, but human action has also made a huge difference. You can help by purchasing a duck stamp every year. Adam Grimm's painting of a pair of Canvasbacks won the contest for the 2014-2015 duck stamp.

7/2/23 Megapodes - Mound-Builders

There's a group of birds that lay their eggs underground — in geothermally heated burrows, or warm sands, or even mounds of organic material warmed by the heat of decomposition. These megapodes or mound-builders — like this Australian Brushturkey

— are found in Australia, New Guinea, and nearby islands. The male builds a mound and adjusts the amount of material to maintain a constant temperature. After a long incubation, the eggs hatch and the chicks claw their way to the surface. They never know their parents, but emerge fully feathered and capable of flying and feeding themselves.

7/3/23 Clean Beach Week

This week is Clean Beach Week. Many busy beaches are also where declining species such as Piping Plovers and Least Terns have their nests. Keeping litter off the shore helps make sure that birds don't pick up plastic and other waste and try to feed it to their young. Staying out of dunes and marked-off areas where birds are known to nest ensures that people can share the beach with birds and their young for years to come.

7/4/23 Bald Eagles' Daredevil Cartwheel Flight

Two eagles locking talons high above the ground might look like they're risking injury, but it's a normal courtship behavior called the "cartwheel display." Fully entangled, the two birds begin spinning to the earth, disengaging just before they smack the ground. Their clasp could last for hours. At last, the eagles unlock talons and fly off. Rival adults sometimes perform the same flight.

7/5/23 Isaiah Scott on Birds in Gullah Geechee Culture

Isaiah Scott is a twenty-year-old birder who already runs a popular Instagram account called Ike's Birding Hikes. He has a passion for learning more about his Gullah Geechee heritage. The Gullah Geechee are the descendants of enslaved West Africans living on the coast of North and South Carolina, Georgia, and northern Florida. Isaiah is working on a field guide to birds in Gullah Geechee culture, as birds are important cultural symbols to the Gullah Geechee.

7/6/23 Elegant Black Tern

The Elegant Black Terns breed in summer on secluded wetlands across the northern states and Canada. Because of major losses of wetlands in their breeding range — especially in Canada's prairie provinces — Black Tern numbers have dropped dramatically since the 1960s. The future of this beautiful bird depends on protecting and restoring high-quality wetlands. Recent research shows that artificial nest platforms can enhance the terns' breeding success.

7/7/23 Music of a City Lake

A city lake is one of the most prized places in a fast, growing environment. It's also often difficult to distinguish all of the bird calls from each other. With a splash of a beak, a glide of a wing, and an eye of a predator — listen closely, and then again to sharpen your bird ear.

7/8/23 How Birds Produce Sound

Nearly all birds produce sound through an organ unique to birds, the syrinx. In many songbirds, the syrinx is not much bigger than a raindrop. Extremely efficient, it uses nearly all the air that passes through it. By contrast, a human creates sound using only 2% of the air exhaled through the larynx. Birds whose syrinx is controlled by only one set of muscles have a limited vocal range. This Song Sparrow, using several pairs, can put forth a cascade of trills and notes.

7/9/23 Just Whose Ducklings Are Those?

It's spring, and a female duck swims across a pond with ducklings in tow. Some of the youngsters might not be her own. Wood Ducks and others may lay some of their eggs in other ducks' nests — or in the nests of other kinds of ducks, like Common Mergansers and goldeneyes. Biologists call this nest parasitism or egg dumping. Perhaps it's a kind of insurance against the loss of a nesting female's own eggs or brood. Hooded Mergansers, like this one, are frequent recipients of eggs from other species. It's a good bet that mother duck has at least one – and maybe more – foster ducklings.

7/10/23 Seabirds Thriving on Volcanic Slopes

In August 2008, Kasatochi Island erupted in the middle of auklet breeding season, burying tens of thousands of chicks in hot ash. At first, the auklets' future on the island appeared bleak. But in just a few years, the birds had returned in force. Thousands nested within the innumerable chambers left behind by sea-cooled lava.

7/11/23 Grounded Geese

In spring and summer, the paths around local ponds might have some fluffy obstacles: young goslings along with their caring and defensive parents. Adult Canada Geese lose their flight feathers for several weeks in the summer, often while they're raising a brood of goslings. Without the ability to fly away from people, and with their young to protect, grounded geese may act especially territorial. Fortunately for a growing family of geese, newly-hatched young are able to swim and even dive underwater within just 24 hours.

7/12/23 Bill McKibben on Leaving Behind a Better World

Writer and environmentalist Bill McKibben has been pushing for climate solutions for decades. Now in his 60s, Bill's working to organize people aged 60 and older with his new group called Third Act, to leave behind a better world for their loved ones.

7/13/23 Why Do Owls Bob Their Heads?

If you were to stand face to face with an owl, including this Great Gray Owl, it would eventually move its head, bobbing rhythmically from side to side, then forward, then back. Or almost completely upside down. This head-bobbing action helps make up for an

anatomical limitation: an owl's eyes are fixed in position — they can't move the way a human's eyes do. The owl's varied head movements help it judge the position and distance of things around it — essentially, to triangulate on objects, including potential prey and to build a composite picture of its surroundings.

7/14/23 Milkweed: A Whole Ecosystem on a Plant

Milkweed plants are important to Monarch butterflies, which depend on milkweed to raise their caterpillars. But Monarchs aren't the only ones who benefit from milkweed. Scientists once documented hundreds of insect species they found eating some part of the common milkweed plant – including 132 species of beetles alone. When it's part of a diverse community of plants, milkweed helps many species find food and shelter, including birds.

7/15/23 Eavesdropping on Babies

Around this time of year, many baby birds are begging their parents for food. A Hairy Woodpecker chick calls from its nest carved deep within a dying tree. A Great Horned Owl juvenile reminds his parents "Hey! I'm over here! Feed me!" Moving from forest to water, we find this American Coot chick hoping to be fed by its parent.

7/16/23 How Toucans Stay Cool

The Toco Toucan of South America has evolved to stay cool in the sweltering heat of the tropics. Relative to its body size, the Toco Toucan has the largest bill of any bird in the world, accounting for a third of the body's entire surface area. It's also laced with blood vessels and wholly without insulation — features that make it a superb structure for getting rid of excess body heat.

7/17/23 What Makes Feathers Both Strong and Light

Bird feathers are famously light, but they're also strong, holding up under tricky flying and high winds. They're made of beta keratin, a tougher version of the keratin that makes up human fingernails and hair. They also have an intricate branching structure that makes them highly flexible and free of unnecessary weight.

7/18/23 "Clearing"

In this episode, writer Camille T. Dungy shares the poem "Clearing" from her new book, *Soil: The Story of a Black Mother's Garden*.

7/19/23 Song Neighborhoods

Birds of the same species don't always sing exactly the same as each other. But those that live near each other sometimes have similar songs. Scientists refer to this pattern as a

song neighborhood. It's less like a regional dialect among people that's found over a large area. It's more local than that, like a group of friends copying each other's mannerisms.

7/20/23 Value of a Dust Bath

It might sound strange, but dirt helps birds scrub themselves clean. Birds of all sizes (like the Eurasian Skylark) often scrape a depression in the ground and flick dirt onto their bodies, shimmying to shake it off. Experiments showed that birds use dust to prevent oils from building up on their feathers and to remove dandruff — much like humans using shampoo in the shower!

7/21/23 Architecture for Avians

During her first year at the Yale School of Architecture, Kenyan graduate student Barbara Nasila was tasked to design a hypothetical outdoor pavilion in a local neighborhood called Dixwell, featuring an original copy of the enslaver John James Audubon's book, *The Birds of America*. As Barbara got to know Dixwell, she realized that there was already an existing conversation about birds in the community. She designed an urban oasis with bird habitat and space for community groups — but she left out *The Birds of America*, feeling that Audubon wouldn't have cared about this project.

7/22/23 Nest Boxes Help Bring Birds Back

Wherever you live, chances are a sweet-singing, cavity-nesting bird would be happy to perform in your yard — and it might stick around if you offer it a cozy nest box, like the one this Carolina Wren enjoys. Natural cavities, like old woodpecker holes, are often in short supply. So putting up a box in the right place — and that's the right size to accommodate them — is truly an act of stewardship.

7/23/23 Birds in Summer - The Heat of the Day

Just a few weeks past the solstice, and the real heat of summer is yet to come. Some shorebirds are already on their way south, but most songbirds will be here for a while longer. What's the best time of day to look for them? Many birds are most active in the early morning, taking advantage of the abundance of insects at that hour. Midday heat sends people inside, and birds take a siesta, too. And then, both birds and bugs rev up again in the late afternoon. But hummingbirds and also gulls — including this Glaucous-winged Gull — forage all day long!

7/24/23 Great Blue Herons on Land

Throughout much of North America, the Great Blue Heron graces waterways, ponds and lakes. They're built for hunting fish and amphibians along the water — so it might be a surprise to see one stalking across a field, not a drop of water in sight! But sometimes herons leave the water to pursue prey on land, like big insects, frogs, and even small

rodents.

7/25/23 Birds, Nests, and Camouflage

Bird nests can be hard to find, often hidden in plain sight. Is the clever camouflage simply the result of using building materials that the birds happen to find? A Scottish research team used birds popular in the pet trade, Zebra Finches, to try and find out. The team gave nesting Zebra Finches two sources of paper to build their nests from: one that matched the papered walls of their cage, and one that did not. By and large, the finches built nests that blended in with their background.

7/26/23 Magpie-Jay Flocks Are Led by Females

Found in much of Central America, White-throated Magpie-Jay flocks are family groups led by a dominant female. They include a mate and several female offspring that bring food to the primary female and her young. It's an example of cooperative breeding, when birds other than the parents help out to raise young.

7/27/23 Paradise-Whydah

A few times each year, the Eastern Paradise-Whydah puts on its party clothes. This small finch is found in East Africa, and males and females generally share the same nondescript appearance. But when it's time to mate, the male sprouts extravagant, long, black tail feathers two or three times the length of his body. The feathers make it look like he's wearing a long black cape, thus the nickname, "the widow bird."

7/28/23 Stowaway Birds

When they migrate, tiny songbirds that spend most of their lives on land fly hundreds of miles over the ocean at a stretch – and they get tired. A recent study suggests that birds migrating over busy shipping routes in the Mediterranean Sea may use the decks of sea vessels as places to catch their breath when the weather turns bad.

7/29/23 Sparrows Sing in Arizona Monsoon

Midday temperatures in southeast Arizona soar above 100 degrees during the month of July. But relief is coming. A summer monsoon refreshes the Sonoran Desert like a second spring. Grass grows lush, wildflowers spring forth, and birds sing. Cassin's Sparrows sing their plaintive phrases almost nonstop. Botteri's Sparrows add their distinctive sputters and trills. And a Rufous-winged Sparrow — like the one pictured here — voices its gentle melody.

7/30/23 Sleeping on the Wing

Some swifts and frigatebirds stay aloft for months. But for a long time, scientists did not know if the birds might be sleeping on the wing. A 2016 study provided answers. Tiny

devices attached to the heads of frigatebirds revealed fascinating information: the birds did sleep while aloft, most often one half of the brain at a time. But they also fell into normal, whole-brain sleep and sometimes, even deeper REM sleep. But this deepest sleep came in bursts of just a few seconds — an inflight power-nap.

7/31/23 Sandhill Crane Families Stick Together

Sandhill Crane families form a close bond. A pair of adults might travel north with their young from the previous summer, along with grown-up offspring from several years ago. After the breeding season, families will stick together for the journey south and the winter, even in large flocks. The parents often remain together for the rest of their lives.

8/1/23 Seeing a Chicago Beach in a New Way.

Mikko Jimenez is a PhD student doing research on bird migration. Growing up in Chicago, he played beach volleyball at Montrose Beach, a popular spot on the lake shore. At the time, he wasn't so aware of birds, but as he developed an interest in birding in college, he realized that his old beach volleyball spot was also one of the best places to see birds in the Chicago area.

8/2/23 Fruit as a Brib

In summer, many shrubs bear fruit that birds find irresistible. Elderberries, serviceberries, blackberries, dogwood berries, mulberries, and currants attract many species of birds, including waxwings, tanagers, robins, warblers and this Rose-breasted Grosbeak. Plants offer this bounty in exchange for birds' help in distributing their seeds. And in dispersing pollen, birds, bats and insects also help to guarantee a new crop of berries!

8/3/23 Great Kiskadee: Unconventional Flycatcher

An unusual flycatcher called the Great Kiskadee takes on much bigger opponents, sometimes even riding on the back of a falcon for a few seconds to drive them off. Chunky and robin-sized, kiskadees live along wooded edges near water all the way from South Texas to Argentina. They're a familiar sight around rural towns and villages.

8/4/23 Chickadee Line-up

You'll find the Black-capped Chickadee across the northern US into Canada. The Carolina Chickadee holds sway in the Southeast. Hear the husky voice of a Mountain Chickadee in the Rockies. Travel to Canada for the Boreal Chickadee. This Chestnut-backed Chickadee calls the Pacific Northwest home. The Mexican Chickadee just nudges into SE Arizona. And the Gray-headed Chickadee turns up north of the Arctic Circle.

8/5/23 Blind Snakes and Screech-Owls

During the breeding season, when Eastern Screech-Owls capture the worm-like reptiles known as blind snakes, they deliver them to their chicks alive and wriggling. Some are gulped down immediately, but others escape by burrowing beneath the nest. The surviving “snakes” feed on the insect larvae they find in the nest — larvae that would otherwise parasitize the owl nestlings. A study conducted by Baylor University scientists found that screech-owl chicks grew faster and healthier in nests kept vermin-free by the blind snakes.

8/6/23 Creating an Inviting Habitat

Bird feeders and birdbaths are great ways to attract birds to your yard, but they aren't the only ways to entice our feathered friends. Planting an area densely with native shrubs, trees, and other vegetation can create a natural look that some birds are more likely to feel at home in because it resembles their native habitat. Shy singers, like the Fox Sparrow or Veery, will repay you with their beautiful songs.

8/7/23 Finding the Links Between Plants and Birds

There are many great tools for identifying birds, some of them right on your phone. If you're stumped on an unfamiliar plant species, iNaturalist is a great resource. When you upload a photo to iNaturalist's website or mobile app, it uses AI to make an educated guess on the species ID. A community of online naturalists then helps confirm the ID. Finding the links between plants and birds can show you how birds see the world, and what they need to survive and raise their young.

8/8/23 Pheasants of Detroit

Because of its abundant open space, Detroit, Michigan has a thriving ring-necked pheasant population. The birds have endeared themselves to many by representing a connection to the natural world. But some worry what upcoming development might mean for pheasants and their future in the city.

8/9/23 Great Horned Owls in the Neighborhood

Not all owls live in the deep woods. Many Great Horned Owls make their homes in urban areas. Though mostly nocturnal, Great Horned Owls are also active early in the morning and just after sunset, offering a chance to see them hunting for rodents and other prey. Look for their distinctive horns, which are really just feather tufts. At night, you might hear their deep, syncopated hoots echoing through the neighborhood. Avoiding toxic rodenticides helps protect Great Horned Owls and other urban raptors.

8/10/23 Ospreys Never Stop Building

Ospreys are remarkable nest builders. Many reuse their massive stick nests from the previous year, but continue tinkering with it once the nesting season begins. And the nest transforms along with the growing chicks. It's bowl-shaped at first, corralling the young

birds, but it gets flatter after the chicks hatch. By the time they fledge, it has fully flattened out.

8/11/23 Andean Condors Soar for Hours Without Flapping

In the blue skies over the Andes Mountains, Andean Condors look majestic, with a ten-foot wingspan. While flying, according to researchers from Argentina and the UK, Andean Condors only flap one percent of the time. One bird was tracked for more than 100 miles over five flapless hours.

8/12/23 Best Nest

Some birds woo a mate by building the best nest. Males of many weaverbird species construct a series of intricately woven nests to impress a prospective partner. A male Red-winged Blackbird can even attract multiple mates if he controls prime breeding territory. Adélie Penguins construct their nests on mounds of stones, and partners often exchange stone gifts during the course of construction.

8/13/23 Most Abundant Birds in North America

By August, most birds in North America have finished nesting, bringing billions of new birds into the world. So many birds. It might make you wonder: what is the most abundant bird in North America?

8/14/23 Some Birds Have Two Voices

The amazing vocal organ found in most birds, the syrinx, has two sides, with different sets of muscles and nerves controlling each side. That lets some songbirds sing two separate melodies at the same time. The Veery, a species of Thrush, can even sing a rising melody and a falling melody simultaneously with the two halves of the syrinx!

8/15/23 What's Behind Those Lustrous Red Feathers?

Male Northern Cardinals, Scarlet Tanagers, and House Finches all have striking red plumage that's thought to play a role in attracting mates. Males with the brightest red feathering tend to have the best luck with the females. Scientists think that a male's redness signals to females that he has just what it takes to help produce superior offspring. But just because a male is a brilliant shade of red... does that mean he's stronger or more fit than his duller-colored competitors? It might be so, but it's complicated...

8/16/23 Lilli Holden on the Ecology of Vacant Lots

In her grandmother's neighborhood in Chicago, Lilli Holden made an early connection with the outdoors by playing in a vacant lot with a large old tree. Now an emerging environmental leader in Chicago, Lilli has a different perspective on vacant lots, many of

which were properties destroyed in the city's 1968 riots that were never rebuilt due to a lack of investment in Black communities. Because they're such a big part of the landscape in Black communities on the West and Southside, Lilli wants to rethink how vacant lots fit into the ecology of these economically-challenged neighborhoods.

8/17/23 Bellbirds Turn It Up to 11

The four species of South American bellbirds can make a real racket, including this Bearded Bellbird. Hidden in the tree canopy, males cannot see one another as they sing — but they sure can hear each other! Their ear-splitting songs carry over long distances. The loudest of the species is the White Bellbird, reaching an ear-splitting 125 decibels — louder than a rock concert! It's the loudest bird song ever documented.

8/18/23 Birds Crossing the Pacific

Over 12,000 miles across at its widest point, you might think the Pacific Ocean is a barrier that even high-flying birds can't cross. Think again — some species make the trip every year as part of their life cycle. During the spring, Bar-tailed Godwits break up their trip from New Zealand to Alaska with a stop in the Yellow Sea off the coast of East Asia. But for their winter migration, they fly from North America to New Zealand without stopping. The longest recorded godwit journey is over 8,000 miles of uninterrupted flight.

8/19/23 Clair de Loon

August 22 is the birthday of renowned French composer, Claude Debussy. Born in 1862, Debussy is known for his impressionistic sonic portraits, like *La Mer*, about the sea. But one of his best known works is an earlier piano piece, *Clair de Lune*. The song is quiet and haunting. Which got us thinking: what if we paired it with the most haunting birdsong — the song of loons? Enjoy *Clair de Loon*.

8/20/23 Pigeons and Head-bobbing

Pigeons seem to bob their heads as they move, like they're grooving to an internal tune. But what look like head bobs are actually momentary pauses of the head while they walk. Their eyes are fixed in their sockets, so that pausing enables the pigeon to take a brief, steady view of its surroundings. Without those pauses, they'd just see a Blair Witch, shaky-cam mess!

8/21/23 A Song That Has Survived for Thousands of Years

Sometimes, a species' song changes over the course of a few decades. But a bird that lives in the mountains of eastern Africa, the Forest Double-collared Sunbird, appears to have kept the same song for at least 500,000 years. That's the amount of time that two populations of the species split up into two separate mountain ranges. Despite a lack of contact between those populations, they sing a nearly identical song, suggesting that it's very similar to the one their ancestors sang long ago.

8/22/23 Why Do Some Birds Flock?

When birds like these Dunlin form flocks, each individual is less likely to be captured by a predator. Some shorebirds that forage with their heads down, like godwits, will flock with birds that forage with their heads up, like curlews. Still other birds work together — like American White Pelicans driving fish before them or auklets that surround schools of herring and herd them like a border collie does sheep.

8/23/23 Southern Lapwings Defend Their Nest

Nature educator Johanne Ryan shares her observations of Southern Lapwings, shorebirds that make their nests on the ground in open areas and vigorously defend them. If a potential predator approaches, the parent will sound a piercing alarm call. If that doesn't work, the lapwing will charge the opponent, using a secret weapon — sharp, bony spurs on the bird's "wrists."

8/24/23 Do Crows Sing?

It's been said that if someone knows only three birds, one of them will be the crow. They're common, easy to see, and even easier to hear. But crow voices are complicated. Altogether, crows may use 30 sound elements in different combinations, and one of the most intriguing is their song. Unlike many birds, crows don't sing loudly to attract mates from a distance. Instead, they sing softly — and at close range — during courtship, with a mix of soft cooing, rattles, growls, bowing movements, and mutual nuzzling.

8/25/23 Arizona Woodpecker and the Sierra Madre

Found in the Sierra Madre, the Arizona Woodpecker has a special connection to the mountain range. Sharing mid-elevation pine and oaks with fellow border straddlers, these small brown birds with white and brown cheeks stand out from other Woodpeckers with their heavily marked white underparts. Uniquely, they forage by flying to the base of a tree and then spiraling up the trunk. And in courtship, the male turns himself into a paper airplane, holding his wings steady and gliding toward his mate.

8/26/23 Where Do Fledglings Go?

By late summer, most birds hatched in spring are on their own, without help from their parents. Where do they go? Young migratory birds will head south in late summer or fall, in the pattern of their species. But most non-migratory birds born last spring — such as this immature Bewick's Wren — will need to find an unoccupied territory. So they disperse more widely than the established adults. Newly fledged Bald Eagles embark on a nomadic life. Sometimes they fly hundreds of miles in a day, a journey that may take them across the continent.

8/27/23 Watching Birds' Behavior - Birdwatching 102

To distinguish one bird from a similar one, watch how the bird moves. Does it flick its wings? Bob up and down? Flip its tail? The White-breasted Nuthatch (right) works its way down the trunk of a tree, while the Brown Creeper works its way up. A field guide usually mentions these behaviors, and watching for them can help you determine which bird is which. It's like detective work: gather enough clues, and you'll solve the mystery!

8/28/23 Moon-Watching for Migrating Birds

Before the high-tech gadgets used to track bird migration today, there was moon-watching: a technique dreamed up in the 1940s by ornithologist George Lowery. Using telescopes pointed at the moon to see the silhouettes of migratory birds, Lowery helped show that birds regularly migrate across the Gulf of Mexico and organized the first continent-wide survey of migration in North America. Learn more about the history of bird migration research in Rebecca Heisman's new book *Flight Paths: How a Passionate and Quirky Group of Pioneering Scientists Solved the Mystery of Bird Migration*.

8/29/23 Harsh Beauty of Grackle Songs

Ranging from metallic hisses to electronic yodels, sounds of grackles may not be music to our ears—but they have their own rough beauty, a distinctive, primal harshness. Grackle songs evolved to carry through their nesting habitats — dense marshes and brushy landscapes — where more lyrical notes and phrases wouldn't carry well. However strange they may sound, they know how to make themselves heard.

8/30/23 Birds Love Sunflowers

Found throughout North America, the common sunflower can grow up to ten feet high, towering over other herbs and grasses. And that's only half the story: their roots can reach just as deep in the soil. They're rugged, adaptable plants that bring beauty — and food — to the ecosystem. Planting sunflowers in a public green space or a backyard can benefit pollinator insects as well as finches and other birds that seek out their seeds, which often last well into the winter.

8/31/23 Migrations: Indigo Bunting, Master Stargazer

The stars appear to rotate in the sky, raising the question of how birds can use stars to navigate during migration. Ornithologist Stephen Emlen brought Indigo Buntings to a planetarium, tracking their movements as the simulated night sky changed above them. The buntings oriented themselves using star patterns that appear to rotate the least — especially the North Star, Ursa Major and Cassiopeia.

9/1/23 Birding With a Baby

Writer Jen Sizeland has found peace through watching birds throughout her life, so she wanted that for her child, too. When she was pregnant, she sought to introduce her unborn child to birdsong. As a newborn, she and her baby would listen to the dawn

chorus together. Now as a toddler, he joins her watching raptors soar over parks and waterbirds paddling across lakes.

9/2/23 The Alula

Adjusting the flaps on an airplane's wing allows a pilot to control lift and drag — and the design of these flaps was inspired by the wings of birds. All flying birds have what's called an alula on each wing. At the center of the front edge of the wing is a structure covered with three to five feathers that functions much like a flap on an airplane's wing. The alula helps create lift and also prevents stall when a bird comes in for landing.

9/3/23 Swifts Roost in Chimneys

What could bring crowds of people out after sunset on a September evening to stare at ... a chimney? Swifts, of course! Scores of swifts form a funnel-shaped cloud above the right kind of chimney, then they begin their descent. First one, then a few more, then dozens, then hundreds swirl right down into the chimney. You can help Chimney Swifts and Vaux's Swifts by providing a roosting tower.

9/4/23 Migrations: The Triumphant Comeback of the Aleutian Cackling Goose

Aleutian Cackling Geese, which have a slighter build and shorter beak than Canada Geese, build their nests on a chain of islands off the western coast of Alaska. In the 1700s, fur traders introduced foxes to the islands, nearly wiping out the geese. For decades, they were believed to be extinct. But in the 1960s, a biologist discovered about 300 birds nesting on Buldir Island. Habitat protections have allowed their populations to recover.

9/5/23 The Private Lives of Public Birds

Jack Gedney's book, *The Private Lives of Public Birds*, is dedicated to the familiar birds we see and hear in our neighborhoods. Illustrated by Anna Kus Park, the book shares charming vignettes about the birds' behavior that are scientifically accurate but that also have an emotional weight to help us connect deeper to these birds.

9/6/23 Juvenile Shorebirds Head South

Like most juvenile shorebirds, this young Black-bellied Plover was abandoned by parents that began their southbound flights from the Arctic National Wildlife Refuge a few weeks earlier. It will join other young Black-bellied Plovers as they make their way south. This little flock of birds could arrive on the coast of Washington within a few days if they make a direct flight, or within a week or more if they stop at a wetland along the way. Some will stay, but others continue their continent-spanning journey, arriving in coastal Venezuela at the end of December.

9/7/23 New Zealand Bellbird

A forest in New Zealand rings with the sound of bellbirds, also known as Korimako or Makomako. Many bellbirds sing together, especially in the morning. Pairs sing duets. And a pair may counter-sing with its neighbors, perhaps letting them know that this patch of land is taken. It all builds to a brilliant, ringing dawn chorus.

9/8/23 Parrots Using Video Chat to Keep in Touch

Knowing how clever parrots are, researchers wanted to see how they'd respond to another parrot saying hi on a tablet or phone. After being trained how to start a call, many parrots chatted amiably on calls and stayed on for the maximum amount of time. Some birds even seemed to develop friendships, choosing to stay in touch even after the experiment ended.

9/9/23 Cowbird Song and Password

As most young male birds get ready to leave the nest, they learn their species' song by hearing their male parent sing it again and again. They imprint on their father's song. So how does a Brown-headed Cowbird, raised by parents of a different species, learn to sing the correct song? The "chatter call" of an adult cowbird triggers something in the young bird's brain. Like a kind of "password," the chatter call guides the young bird in recognizing what species to identify with, even though cowbirds are fostered by as many as 220 different species!

9/10/23 Migration Takes Guts — Until It Doesn't

This Bar-tailed Godwit makes one of the longest migrations of any animal — a 7,200-mile non-stop flight each autumn from western Alaska to New Zealand. In his book *A World on the Wing*, Scott Weidensaul explores the remarkable transformation godwits undergo to make this migration possible. Their digestive organs shrink as their weight more than doubles in stored fats and muscle mass.

9/11/23 Woodpeckers Carve Out Roost Cavities, Too

In spring, we often hear woodpeckers hard at work, carving out nest holes in tree trunks. And now that fall has arrived, we may hear that excavating sound again. Some woodpecker species stay year round in the region where they nest, while others migrate south in winter. Those that remain, like this Pileated Woodpecker, are chiseling out roosting cavities, snug hollows where they'll shelter during the cold nights of fall and winter.

9/12/23 Kelp in the Eagles' Nest

"A pair of Bald Eagles will reuse their nest each year and repair it with new tree branches. But recently in British Columbia, scientists came across an eagle nest made largely out of dried kelp. Back in the '90s, that very nest had been made out of tree

branches. What changed? Sea Otters were reintroduced to the landscape, which helped kelp forests flourish — and occasionally wind up in an eagle’s nest.”

9/13/23 Seeing the Rainbow in a Bird's Feathers

We make it a habit to detail the broad and beautiful spectrum of bird colors, but iridescent feathers are undoubtedly among the most mesmerizing. When sunlight hits the Bufflehead’s dark head feathers at the right angle, their colors transform into shades of the rainbow, from deep violet to green and gold. Common Grackles, caught in natural light, gleam gold, green and blue-purple. Starlings, too. And the dull gray Rock Pigeons shuffling around a city park might reveal a glimpse of the electric teal and lavender, shifting shades on their throat.

9/14/23 Amazing Aquatic American Dipper

The American Dipper stands on a rock in a stream, bobbing up and down on its long legs - "dipping" - hence the name. But watch! This nondescript bird steps off a small boulder right into the torrent, and begins to peer under water. What the American Dipper might lack in bright color it more than surpasses with amazing aquatic abilities. Watch the video of a dipper fighting the current – below. You can learn more about river restoration and protection at American Rivers.

9/15/23 Climate Change Leads Male Birds to Migrate Sooner

For years, biologists have been seeing migratory birds arriving earlier in the spring due to the effects of climate change. But surprisingly, the effect on arrival time is different for members of the same species. Male birds are changing their arrival dates faster than females in many species of birds that breed in North America. While it’s still unclear what effect this has on bird populations, understanding how climate change can affect females and males differently can help guide our conservation efforts.

9/16/23 Raptors in the Mojave Desert

Desert raptors get most of their water from eating prey animals. Biologist Blair Wolf explains, “if you think of any insect or a mouse or something like that, they’re maybe 75% water.” Those animals become less plentiful in a hotter, drier climate. Extreme warming poses a direct danger to the raptors (such as this Harris's Hawk) and leads to lower rates of reproduction. Lacking sufficient water, they may not be able to produce eggs, and there must be enough food for their nestlings to thrive.

9/17/23 Nesting Niches

American Robins (like this male seen here with its young), House Finches, and Song Sparrows may all nest within one small garden. By selecting different nesting strata, the species avoid competing for the same nesting sites. If you plant your garden in multiple

layers – trees both short and tall, shrubs, and ground-hugging thickets – you may be rewarded with a multi-layered medley of bird song.

9/18/23 Finches Singing Over the Sidewalk

The songs of two common finches provide a steady soundtrack in cities across North America: the House Finch and the American Goldfinch. While they can sound similar, a couple of key features help set them apart. House Finches sing sweetly but often have a sharp, buzzy note near the end. Goldfinches sing rapidly, often repeating a note several times. They also often make their distinctive call, which sounds like someone quickly saying “potato chip!”

9/19/23 Resplendent Quetzal: Mexico's Sacred Bird

Found in Southern Mexico and Central America, Resplendent Quetzals have a striking blue tail up to three times the length of their bodies. That's probably why the Aztecs considered this bird a representation of Quetzalcoatl, the feathered serpent, one of the most worshiped gods across ancient Mesoamerica. But no matter how sacred, Resplendent Quetzals are currently considered near threatened due to a declining population. Deforestation and illegal trade are the main threats to their survival.

9/20/23 Mair Marsiglio on Therapeutic Bird Walks

Mair Marsiglio is an avid birder, and they are also a psychologist with a background in trauma therapy. A few years ago Dr. Marsiglio worked with the San Francisco Bay Bird Observatory to facilitate mindfulness birding walks for veterans in a trauma treatment program. The walks helped participants ground themselves and provide a sense of connection.

9/21/23 Power of Albatross Partnerships

Waved Albatrosses produce such slow-growing, needy offspring that females lay only a single egg every two years. And both parents need to share the load until youngsters can hunt on their own. Albatrosses tend to pair for life, and reunited pairs go through an elaborate, synchronized ritual of braying, wing spreading, and bill tapping to reaffirm their bonds.

9/22/23 Letter to a Dark-eyed Junco

In this episode, ornithologist J. Drew Lanham shares a note he has written to a Dark-eyed Junco, which he fondly nicknames “snowbird.”

9/23/23 Brown-headed Nuthatches of Apalachicola National Forest

"Many Brown-headed Nuthatches make their home in the tall longleaf pines of the Apalachicola National Forest in Florida. Twittering constantly, the birds probe for tiny

insects or extract seeds from cones in the trees' upper branches. Forests of longleaf pine once dominated the sandy coastal plain from Virginia to Texas, but the tall, straight pines proved irresistible for their lumber. Now, much of the forest is gone, replaced by dense planted stands of quicker-growing slash pines.

As our population grows, and more and more land is devoted to human uses, our national forests become increasingly important for birds, both rare and common."

9/24/23 Who Likes Suet?

Chickadees and titmice, nuthatches and jays, and woodpeckers, like the Pileated pictured here, all love suet. As do birds whose beaks can't open seeds, like tiny kinglets, and almost any wintering warbler. The Brown Creeper, usually creeping up tree trunks, is a cool bird to discover at your suet feeder. And in the West, look for mobs of tiny Bushtits, taking a break from their normal diet of insects and spiders.

9/25/23 Millicent Ficken Studied How Birds Play

Millicent Ficken spent her career studying bird behavior and communication. The first woman to earn a PhD in Ecology and Evolutionary Biology from Cornell in 1960, Ficken authored over 100 scientific papers. She discovered that male hummingbirds have a whole repertoire of songs rather than just one, outlined the linguistic differences between penguin species, and showed that chickadees take turns singing in the morning. She was especially fascinated by how birds play, showing that bird play almost always has a pressing purpose — they're practicing a skill they need to survive.

9/26/23 Monk Parakeet: Little Blue-Green Invaders

Monk Parakeets, also known as Argentine Parrots, are native to South America but have become popular as pets – thanks in part to their intelligence and ability to mimic human speech. But in some areas, such as Mexico, these birds have become invasive. After being released or escaping, some Monk Parakeets have formed feral populations that have quickly spread, competing with native bird species for resources.

9/27/23 Strange Chickadee Songs on Massachusetts Islands

The song of the Black-capped Chickadee pretty much the same throughout the U.S. and Canada — with just a few exceptions, like on some Massachusetts islands. Chickadees on Martha's Vineyard and tiny Tuckernuck Island nearby have developed songs entirely their own. It's likely that the birds' isolation from mainland birds led them to develop unique behaviors.

9/28/23 HawkWatch

After hawks and eagles, some of the sharpest eyes belong to hawk-watchers, experienced spotters who count raptors during spring and fall migration. Groups like HawkWatch International organize census counts of hawks (like this Red-tailed Hawk) and other

raptors. HawkWatch sites lie along primary migration routes like mountain ridges and coastlines, where updrafts of rising air funnel the birds' north-south movement. Different species peak at slightly different times.

9/29/23 Letter to an Eastern Wood-Pewee

In this episode, ornithologist J. Drew Lanham reads a letter he has written to a wood-pewee, a flycatcher with an "understatedly simple and definitive" song that says the bird's name.

9/30/23 Hooded Merganser

Hooded Mergansers, affectionately known as "Hoodies," nest across most of the northern US and well into Canada. They're especially prevalent around the Great Lakes, though some winter as far south as Florida. By November, courtship and pair formation is well under way. And by early spring, Hoodies will seek out secluded woodland ponds, where they nest in tree cavities or manmade nestboxes. Hooded Merganser eggs are nearly spherical, with surprisingly thick shells. They're ideally suited to the Hooded Merganser's nest of choice — a cavity or a hole.

Local news, weather, and sports are regular features on 91.7 FM. Our sports director Lily Burke along with staff member Dan Dunphy broadcast the West Chester University Golden Rams football game vs. Bloomsburg for Homecoming weekend. Golden Rams football and other sports team coverage is very popular both with our local community and West Chester University students. Noah Smith our training director reports that our new classes will bring almost 40 new students to WCUR this fall. WCUR as a student activity at West Chester University is continuing its growth. In this quarter WCUR participated in 6 major campus and community events focusing on West Chester University's 150th anniversary celebrations. This year WCUR-FM will celebrate it's 25th year of broadcasting to West Chester University and the West Chester community.

Our full service web-site has been full updated. University students, the general public, and WCUR Staff can find out the latest in WCUR news, schedules, and events at WCUR.org.



Arthur R. Smith, Associate Professor of Geology (retired), DCO

10/4/2023

Date