

Further Afield

by Robert Harlan
3361 Columbia Woods Dr., Apt F
Norton, OH 44203
kiskadee96@hotmail.com

I enjoy a good road trip every now and then, and birding usually provides the perfect pretext, as if I really needed one. I'm not talking about a simple cross-the-state jaunt, chasing the rarity *du jour*, but rather a long, drawn-out ramble through parts unknown, half for the birding, and half for the journey itself. I savor these trips. If I could afford the time and the money, I'd probably never stop.

But I can't afford it, especially with gas prices, the bane of road-tripping birders everywhere, compelling us all to seriously consider switching to hybrid vehicles, subcompact vehicles, two-wheeled vehicles, equine vehicles, etc. Logically then, trip routing must be judiciously planned, due diligence must be stringently applied, and cost-benefit analyses must be prudently employed to account for all possible variable elements. Or, you could use my preferred method—wing it, charge it, and hope for the best.

At the beginning of each year, as my wife Sandy's vacation-day allotment is replenished, we begin to ponder reflectively over where we might want to visit during the year. As creatures of habit, we usually gravitate to two time-tested favorites—south Florida (more developed, closer, and considerably cheaper, since Sandy's parents own a condo in the area), or Texas (wilder, farther, and costlier, but much birdier and much more adventurous). In most years, we bite the bullet and spend much of April lavishly drinking in great Texas-sized gulps of spring migration amongst the auspicious coastal migrant traps, the lush and thorny subtropical forests, and the Colima-infested desert mountains of the Lone Star State, letting the waves of migration lap over us as they see fit. But not this year.

This year, and I must say without consulting me first, Sandy's sister Laurie decided to get married near her home in Boulder, Colorado, in June. Of course, with only a limited amount of vacation time available to us, our April Texas trip went bye-bye and a summer western swing took its place. So in early June we headed to Colorado, and did the wedding thing. I put on a tie (a field mark I will only rarely and begrudgingly adorn), consumed immoderate amounts of wedding cake, exchanged small talk with new extended family members and other mysterious attendees, all likely never to be seen again, wished the happy couple well, and then went birding. It was traumatic, but I survived.

I'm trusting that you savor road trips as much as I, and that you won't object too strenuously if we abandon Ohio's comfy borders this time around. After all, this column is entitled *Further Afield*, is it not?

And so, and in general, beginning in early June and for the next three

Harlan

weeks, we covered 13 states in a circuitous manner, first escorted west by the direct if mundane I-80, then swooping down to Boulder for the wedding. Our post-nuptial route had us passing through the Rocky Mountains on I-70 to our first multi-day destination, Moab, Utah, doorway to Arches and Canyonlands National Parks. From there, we headed northward past Great Salt Lake, stopping briefly on Antelope Island to acquire a life bird for Sandy, the exotic and splendid chukar, before continuing north to our primary destination, and a destination I wish to expand on in later paragraphs, Yellowstone National Park. After four days in Yellowstone, we reluctantly bolted back east through Montana and North Dakota, but not without detouring strategically to Arrowwood National Wildlife Refuge to hunt for another lifer for Sandy, the awe-inspiring and almost table-ready gray partridge. With these two lifers in hand, now only the noble Himalayan snowcock stands between us and the fulfillment of a lifetime goal—the completion of our Introduced and Countable *Phasianidae* List. Of course, after the partridge, even our joyride through Chicago's rush hour traffic seemed somehow anticlimactic.

But our trip was not confined to birding alone. We also vigorously collected various other sightings and experiences. We tallied license plates, for instance. We managed to spot plates from 46 states, missing only the expected Hawaii, plus the distant New England states of New Hampshire, Rhode Island, and Vermont. This may not seem especially noteworthy, but considering that this past May we tallied plates from 28 states (and from 66 of Ohio's 88 counties) from the Magee Marsh parking lot alone, I think this reveals just how important our own state has become to road-tripping birders. I like that.

We also collected various historical "old west" sites along the way. We visited the rocky outcropping of Pompey's Pillar National Monument, east of Billings, Montana, which received its English name thanks to William Clark (of the Lewis and Clark "Corps of Discovery" Expedition) in 1806. Clark named the pillar after "Pomp," the infant son of their young American Indian guide Sacagawea. Clark carved his signature and the date of his visit into the rock, and today this is the only *in situ* evidence of the epic journey still in existence. In effect, this marking still claims the lands of the Louisiana Purchase for the United States, although I must assume the proper paperwork is also on file somewhere. The birding here was excellent along the shady and well-watered bottomlands bordering the Yellowstone River, and the mosquito crop was especially exquisite.

Also as part of our "old west" collecting theme, we toured the solemn Little Bighorn Battlefield National Monument, where the pride of New Rumley, Ohio, Lt. Col. George Armstrong Custer, ran out of his accustomed luck and now lies buried with the 263 men in his charge. Birding-wise, many grasshopper sparrows found a proper home in the swaying prairie grasses, while a new breed of intruder, a Eurasian collared-dove, impetuously postured its way across the parking lot.

At Lookout Mountain in Golden, Colorado, we visited the grave of hunter, scout, and gadabout Buffalo Bill Cody, which unfortunately smacked a

bit too much of "Hollywood west," rather than "wild west," for our tastes. And speaking of Hollywood, we also look hard for grave of Tonto, but no could find.

So anyway, our first extended stop was at Moab, Utah, where we spent four days collecting arches on our hikes through Canyonlands and Arches National Parks, where the arid landscape can be accurately portrayed as a bouldery hybrid between Flintstonian and Seussian, accented with a dash of extraterrestrial, if one considers Upheaval Dome, now regarded as a probable meteor crater, and the jaw-dropping view from the Green River Overlook at Canyonlands, a plunge so profound, barren, alien, and abyssal that an observer might be excused for imagining him or herself hovering above the lunar surface. Now that's a long sentence.

Birds at Canyonlands and Arches were understandably few. Our most interesting birds were gray vireos, which we found at two spots in Arches, and a singing red-breasted nuthatch, which seemed hopelessly out of place. And blue-gray gnatcatchers, which to me always seem so peculiar and unexpected in dry pinyon-juniper scrub rather than in Ohio's moist deciduous woods, were common and seemed as peevisish as ever, utterly uninterested in my sentiments regarding their habitat preference. And so we moved on.

Heading northwards towards Yellowstone, we spent a birdy morning chukaring at Antelope Island State Park on Great Salt Lake, as I mentioned earlier. The causeway over to the island was teeming with willets, American avocets, black-necked stilts, and Wilson's phalaropes, all feasting on the lake's savory stew. At a few select sites in North America, there are simply too many birds to reasonably comprehend, and the mucky marshes of Great Salt Lake often generate just this sort of sensory overload. The birding here is apparently so good, or maybe the overload is so complete, that even long-extinct species can be found, if only rarely. It was here that we met an eager birder who breathlessly called me over to confirm or deny a tentative identification—upon which I firmly yet graciously assured him that his mourning dove was not in fact a passenger pigeon, a species which would have been a lifer for him. Recognizing that we could not hope to top this extraordinary feat, we moved on with some befuddlement, and with great alacrity.

As Yellowstone would be a "life park" for me, I was eager to experience how it would stand uniquely apart from all other national parks. I had done only a modicum of homework on the area, and of course had seen photos and videos in the past, but really I was hoping to be amazed by whichever wonderments came my way. And amazing wonders they were. No photos could do justice to the grim defile of the Grand Canyon of the Yellowstone River. And certainly no words of mine could begin to do justice to the astonishing variety of volcano-powered thermal features, from gasping and belching fumaroles, to simmering and pungently sulphurous mud pots, to the seemingly endless palette of vividly hued hot springs, to the stars of the show, nature's shameless self-aggrandizers, the geysers. Altogether, Yellowstone was enormous, other-worldly, desperately stunning, and quite odd. I liked it, I

think.

Now it should be said that our first night within the park was something of a letdown. We had made reservations for a Frontier Cabin at Canyon Village, which we understood to be an intermediately-priced accommodation, but complete with a private bathroom, unlike some of the other more depauperate lodging arrangements in the park. And at \$100 a night, I felt we deserved a private bath, instead of a communal bath, or an outhouse, or a tree. Actually, our bathroom was fine; it was our heating unit that was nonfunctional, a factor of some importance given that it snowed earlier in the day. After a trip down to the office, and a visit from the repair crew, our thermostat soared up to 61 degrees (Fahrenheit), before settling off at 58 degrees, apparently exhausted from overwork. We were buoyed, however, with our view which overlooked a charming and quaint maintenance yard, with heavy machinery and great heaps of earth and rock nestled tastefully throughout. At least our furnishings were modern, as in Danish Modern, accented in festive teal and orange Eisenhower-era Naugahyde. On a more positive note, our private bath was supplied with a small scented soap in the shape of a teddy bear, which made me so deliriously happy I forgot all about my frigid digits, and the \$100 a night we were being charged.

Actually, as the years pass, I fear that I am becoming increasingly prissy in my choice of lodging. Whereas not too many years ago I was satisfied with camping or sleeping in the back of our van, now I seem to require a proper bed, cable television, and some sort of continental breakfast, without which I become curiously cranky. I don't envy those travelers who are forced to do without breakfasts consisting of supermarket-sample-sized muffins, self-made waffles, and machine-dispensed orange "juice." Or without expanded cable-channel lineups including the poker channel, the crocodile channel, the cage-fighting channel, and the large block of channels apparently owned and operated by this Rachael Ray woman. At least that's how it seems. But I digress.

The birds at Yellowstone were surprisingly limited, at least in the areas where we explored. We saw exactly one other birder the entire time we were there, but even more dubious was the utter lack of local birding materials available in the park's many gift shops and nature centers. No substantial book on local birds or birding, not even a park bird checklist, could be found. We inquired about this rather glaring omission, and a park employee only half-jokingly told us that although a checklist was available online, they didn't stock any within the park because there was little call for one, and because there were only five birds to be found in the park anyway...the black one (common raven), the blue one (mountain bluebird), etc. You get the point. People apparently are interested in bison and bears, geysers and gushing mud pots, but not birds—which is too bad.

But there were still many birds to be found, as varied as a group of six male harlequin ducks, to Brewer's sparrows and sage thrashers, to red crossbills, to more Barrow's goldeneyes than I've ever seen in my life. The

birding was intriguing, but even for dedicated birders like us, it still took a back seat to geyser collecting, thermal feature gawking, waterfall watching, bison, elk, moose, and grizzly photo-ops, and many fascinating and instructive hours of tourist study.

Even though June, when we visited, is not yet considered peak tourism season for Yellowstone, tourists were aplenty. And even though warning signs were strategically placed throughout the park, and even though copious volumes of cautionary literature was handed out at the entrance gates, and even though common sense would seem to dictate otherwise, a select few tourists continue to prove that common sense is not as common as one might think. After all, despite its 130+ year legacy as a popular tourist destination, Yellowstone is still singularly a very wild place over 99% of its surface area, abounding with tempting yet deadly volcano-driven hot springs, appalling declivities, capricious weather, tranquil yet frigid lakes, and seemingly tame, but decidedly wild and unpredictable large mammals. The combination of welcoming tourist trappings mixed with the harsh realities listed above serves to make Yellowstone a deceptively civilized place, perfectly safe for the wary, but perilous for the oblivious, the frivolous, or the just plain hapless.

While we were at Yellowstone, we witnessed a few lapses of tourist judgment, such as a family “sneaking up on” a bison for an even-closer photo, while dozens of more sensible people watched from a respectable distance; a woman getting on her hands and knees, leaning over the edge of a boardwalk for an extreme close-up shot of a boiling hot spring; even herds of rampaging toddlers running down boardwalks, with parents nowhere to be seen.

But these tragedies-waiting-to-happen are all trifling in comparison to the lengthy chronicle of true tragedies that have occurred at Yellowstone over the years. While calamitous, they still have a way of tweaking a sense of morbid curiosity in all of us, or at least in me.

While in the park, I bought a fascinating book by Yellowstone’s historical archivist, Lee H. Whittlesey, entitled *Death in Yellowstone: Accidents and Foolhardiness in the First National Park* (Roberts Rinehart Publishers, 1995). Over 276 pages, Whittlesey describes the myriad ways people have found to conclude their lives within or just outside the park, while omitting such mundane methods as routine car accidents and illness. A few choice examples follow:

Death by hot dog—On July 20, 1981, David Kirwan, 24, dove headlong into Celestine Pool, which was seething at a toasty 202 degrees, to rescue a friend’s dog, which had unknowingly just jumped in. Suffering third degree burns over 100% of his body, Kirwan died the next day in the hospital. As gruesome as this fate is, and as obvious a hazard that boiling hot springs would seem to pose, Whittlesey lists 19 deaths as having occurred in this manner. In the 1920s, when ranger supervision might have been a bit more lax, “[T]he monthly superintendent’s reports...are loaded with instances of people being burned in the face by looking down into the cone of Old Faithful Geyser.” Much to his credit, Whittlesey avoids callously renaming the geyser

Old Facefull, a temptation I seem powerless to resist.

Beastly deaths—On March 22, 1902, Dick Rock, 49, was displaying to others how tame the bison had become. One bison vehemently disagreed, charging and flipping Rock repeatedly into the air, trampling him into the ground, and goring him 29 times. Or, if you prefer, we have the case of William Tesinsky, 38, who was killed and partially eaten by a grizzly on or about October 4, 1986, while attempting to obtain a close-up photo of the bear. “Tesinsky’s entire neck was missing, probably the reason for his death....”

Death in reverse—On July 13, 1924, Mr. and Mrs. Earl Dunn somehow managed to back their Ford coupe over the edge of the Grand Canyon of the Yellowstone, first falling backwards in their car several hundred vertical feet before the car came to rest at the bottom of a ledge. “The two bodies continued downward, rolling and bouncing off numerous pinnacles and rock outcrops, and landing some eight hundred feet below...Mr. and Mrs. Dunn were mangled and broken and quite dead.”

Well, you get the picture. And I didn’t even include the water hemlock and hydrogen sulphide gas poisonings, the rock falls, snow falls, lightning, capsizings, Indian attacks, stagecoach accidents, or drownings due to hip waders filling with water (about nine cases).

Unique may be an overused word, but I found Yellowstone to be truly unique in my experience. I don’t think that I will ever again be able to sniff a hard-boiled egg, or witness a Coke and Mentos eruption, or side-step a bluish-green puddle of sizzling boiled-over radiator fluid, without thinking of Yellowstone National Park. And perhaps most importantly, I was not gored 29 times.

The Passenger Pigeon: Contemporaneous Accounts from Three Ohio Ornithologists

There is no shortage of testimony to the presence of vast numbers of passenger pigeons Ectopistes migratorius in Ohio during the nineteenth century. Even the dullest observer could not fail to notice them, and the literature abounds with contesting stories about how many were killed with a single shotgun blast or cast of a net, or for how many hours a vast flight of birds passed overhead in migration. Most county histories, even if they have little else to say about birds, devote a few sentences to such spectacles. Our first ornithologist J. P. Kirtland, in his 1838 catalogue of Ohio birds, mentions the "Passenger Pigeon Columba migratoria" without further comment, as if it were so widely known as to be unworthy of further comment. Here, however, we reprint accounts from three respected Ohio ornithologists of a later era who witnessed its swift passage into oblivion.

Then aged 21, John Maynard Wheaton published his "Catalogue of Birds of Ohio" (1861), at the time the most complete and accurate record of our bird life. Five years before his death in 1887, his "Report on the Birds of Ohio" appeared, a scrupulous and exhaustive work of nearly 450 pages, including detailed accounts of 298 species.

Among its interesting annotations are those for the passenger pigeon, for Wheaton had considerable personal experience with this remarkable bird. His lifetime encompassed the span during which it passed so quickly from superabundance into extinction. Dramatic descriptions of its abundance, habits, and distribution are easy to come by elsewhere, but Wheaton's, arising as they do from the heart of Ohio, have a special poignancy. —Ed.

From Report on the Birds of Ohio (1882: 441-2)

Formerly an extremely abundant summer resident and migrant, appearing in all seasons. Now, much less abundant and irregular. Not known to breed at present, though it probably does so. Until about 1855, Pigeons were extremely abundant in Central Ohio, having at and before this time a roost and breeding place near Kirkersville, Licking county. Then, for weeks at a time, they might be observed flying over this city [Columbus] or around its suburbs. In the morning soon after sunrise until 9 o'clock or after, their flight was westward, from the roost. In the afternoon, from four o'clock till sundown they were returning. During these periods, they were never out of sight, and often dozens of flocks were in view at once. These flocks were not of large size, but may be estimated to consist of from five hundred to fifty thousand birds, and it was their daily habit to leave their roost in search of food, in this manner. Whether those leaving in the morning invariably returned the same evening, or how far their journeys for food extended is not known. At such times they fed both in beech and oak woods and cornfields. When feeding upon acorns they were rather quietly dispersed among the branches of the trees, but in the country they flew nearer the ground, and following the plane of any inequalities. Vast numbers were shot, killed with poles on their roosts, or captured in nets. Dr. Kirtland states that near Circleville, in 1850, 1,285 were caught in a single net in one day.

And even this number was not exceptional if the price at which they were sold is any indication. Many thousands were offered for sale in the market of this city. Most of them were brought alive in coops, and the purchaser had the choice of carrying them home alive or having them killed on the spot. If he chose the latter, the seller by a dexterous movement fractured or dislocated the bird's neck between his teeth. The average price at this time was five or six cents a dozen.

Mr. Read states that in the spring of 1851, they appeared "in vast numbers in the fields feeding upon the dead grasshoppers, the remains of the countless hordes, which well night devoured 'every green thing' during the preceding [sic] summer and fall," a statement which will surprise ornithologists who have been accustomed to consider birds of this family as exclusively vegetarian.

On several occasions we have been favored with a general migration of these birds, when they have appeared, as described by Wilson, in "congregated millions." This was the case in 1854, when the light of the sun was perceptibly [sic] obscured by the immense, unbroken, and apparently limitless flock which for several hours passed over this city. In the fall of 1859 I witnessed a similar migration near Granville, Licking county, since which time the birds have been far less numerous. On this occasion I had an opportunity of observing a large flock while feeding. The flock, after a little circling by the foremost ranks, alighted upon the ground, presenting a front of over a quarter of a mile, with a depth of nearly a hundred yards. In a very few moments those in the rear, finding the ground already stripped of mast, arose above the tree tops and alighted in front of the advance column. This movement soon became continuous and uniform, birds from the rear flying to the front so rapidly that the whole presented the appearance of a rolling cylinder having a diameter of about fifty yards, its interior filled with flying leaves and grass. The noise was deafening and the sight confusing to the mind.

During the last ten years Pigeons have appeared irregularly, but usually in spring and fall, in small flocks. Sometimes these linger about swampy woodlands for several days. Possibly they may breed in detached parties, but no such instance is known to me.

The Wild Pigeon breeds in vast communities. The nest of sticks is places in a small tree; the eggs, two, pure white, measure 1.45 by 1.05.

* * * * *

William Leon Dawson's work on Ohio birds followed that of Wheaton by 21 years. Its more flamboyant prose accompanied by photographs and artwork, The Birds of Ohio (1903) was intended more for the public at large than specialists. Still, Dawson was as estimable an observer, and was later to write the first state monographs on the birds of California and Washington. Wheaton had noted the steep decline of the passenger pigeon in central Ohio, and by Dawson's time its numbers were declining fast even in remoter parts of its range. In his account of this bird, he quotes a passage describing human depredations during an annihilation near Petoskey, Michigan, which reported "at the lowest possible estimate, a grand total of 1,000,000,000 Pigeons sacrificed to Mammon during the nesting of 1878." Dawson's subsequent remarks follow. —Ed.

From *The Birds of Ohio* (1903: 426-7)

Even if the last estimate were a hundred times too large (as I believe it to be) it is evident that such wholesale slaughter could not go on forever. The extraordinary flights suddenly ceased during the Eighties. Since that time, What has become of the Passenger Pigeon? has been the puzzling question. There are those who believe that great roosts are now maintained in the northwest, beyond the reach of communication. Others fancy they may have abandoned the migratory habit and taken to staying in Central and South America. Others still believe that they have rather abandoned the gregarious habit, and are to be found only in isolated pairs or small groups well distributed throughout the north. It is known that the birds do breed by single pairs, to some extent at least; but it is altogether probable that the Passenger Pigeons are almost gone—lost in the maw of human greed.

The following is the only recent published instance of the bird's occurrence in Ohio, altho others doubtless have been known locally to hunters: "On March 24, 1900, a solitary individual was shot by a small boy near Sargents, close to the boundary of Pike and Scioto counties, and mounted by the late wife of ex-sheriff C. Barnes of Pike County. This is the only authenticated record for twenty years."

* * * * *

Charles Dury (1847-1931) was a lifelong resident of Cincinnati and among its eminent naturalists, specializing in entomology and ornithology. A taxidermist and collector, president of the Cincinnati Society of Natural History, president of the Ohio Academy of Science, he was a mentor to several generations of scientists. His article on early explorations of Grand Lake St. Marys appeared in the Fall 2006 issue of the Ohio Cardinal. The following article appeared on pp. 52-56 of Vol. 21 (September 1910) of the Journal of the Cincinnati Society of Natural History.

The Passenger Pigeon *Ectopistes migratorius*, Linn.: A Reminiscence

As late as the 60's and early 70's the Wild Pigeons came to southern Ohio in vast flocks. Their fall migrations were a wonderful and impressive sight. These great flights most frequently took place in October, although I have observed them to begin in late September, and continue at intervals into November. The usual time for the flight over Cincinnati and vicinity was in the afternoon and evening, and generally when the day was cloudy. The birds flew in long columns or strings, side by side. They first appeared in the northwest, flying towards and disappearing in the southeast. At times several of these flocks would be in sight at one time, and they were so long from end to end that they reached almost from horizon to horizon. During the day they flew very high, out of the range of shotguns. The present site of the Zoological Garden was then a series of ridges, covered with scattered beech trees, huge old ones with dead

tops. During the flight of the pigeons I have stood on one of these ridges and fired at pigeons as fast as I could reload my muzzle-loading gun, generally with scanty results, until dusk in the evening, when some of the birds would descend and alight on the dead branches of the tree tops, probably with the intention of resting for the night. At such times a few birds were secured, but the number killed in that way was trifling when compared to the wholesale slaughter and exterminating methods of the professional pigeon trappers.

The birds did not come over in the spring in any such numbers as they did in their autumn flight, and probably returned by a different route. At times in the spring, generally April, large flocks appeared in different patches of forest in this vicinity, where they remained for some days. It was in seasons when the beechnuts were abundant on the ground, and they fed on these nuts as long as any of them lasted. When the birds were shot at, they would fly from one end of the woods to the other, and many of them were killed.

For several years in succession a great flock came to the Blatchley woods in the north end of Avondale (now called Rose Hill), where I have bagged as many as I could carry. This was always in April and early May. By late May they were gone. Their method of feeding in the beech woods was very interesting and peculiar. I have seen a large flock fly down onto the ground to glean for beechnuts, those in the rear continually flying over those ahead, so that the mass looked at a distance as though they were rolling over the ground.

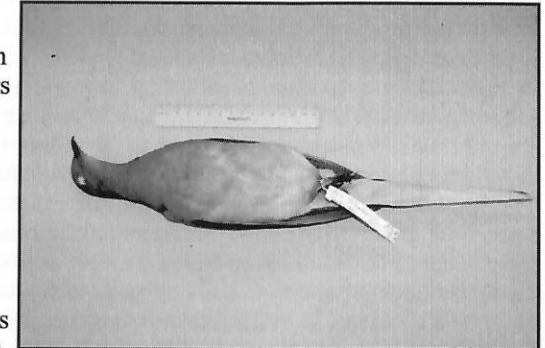
All mast, such as beechnuts and acorns, were picked up, none in sight escaped, and were swallowed whole. I have often been surprised at the large acorns these birds were able to swallow. The bill and throat were very elastic and could be widely stretched. I have shot birds that had the crop so distended with these nuts as to be nearly as large as an orange, and I have taken the nuts out, washed and eaten them.

When the birds were intent on feeding was a favorable time to slip up within shotgun range, which could be done by hiding behind a tree trunk, but if one bird took alarm and flew up, the entire flock was sure to follow.

Some of the birds nested in the great woods (growing at that time) west of Mill Creek, opposite to what is now Elmwood Place. I have shot squabs two-thirds grown that had been hatched there, as late as the year 1875. The pigeons that nested in these woods were not numerous and much scattered over the woods. They usually made their nests high up in the tallest trees.

As a food bird the old ones were not very good, being rather dry and tough, though well flavored, but the younger ones were excellent.

In this woods (then called Este's Woods) I have shot young pigeons



This male passenger pigeon was killed on 1 March 1875 in Columbus, and may very well have been one of those sold at the town market in Wheaton's day. Rule is in centimeters.

in September, nearly one-half grown, that had been feeding on "poke berries" (*Phytolacca decandra*) so that all the fluids of the body were stained with the bright-colored juice of these berries.

The size of the birds and the lateness of the season led me to the conclusion that they were of a second brood and that they were double brooded.

I was acquainted with a couple of men named Cone and Barr, who made a business of trapping wild pigeons. They followed the birds over the country, netting them for the market. To decoy them down to the nets, they used "stool pigeons." These were wild birds which they kept for the purposed in cages. They were made blind temporarily by stitching up their eyelids with a loop of thread. When a flock of birds were seen approaching, the blinded ones were thrown up in the air in front of the nets, and the birds, not being able to see, fluttered down, generally decoying and bringing the flock to the ground. The stool birds could not escape, as a string was attached to the leg. Other decoy birds were enclosed in coops placed so the approaching birds could see and hear them. These men assured me that if they got any at all, they generally secured the entire flock. This was in the spring, near the roosting and breeding grounds.

The captured birds were killed by having the neck pinched and dislocated. They were shipped all over the county in barrels if dead, or in crates if shipped alive. A shooting club that shot at the trap in the old Queen City Trotting Park, used them for targets. Whole crates were used in this way, and most of them were mangled with shot as they rose from the trap into the air.

The traps at that time were made of a long, slender piece of hickory for a spring, on the end of which was nailed a box with a hinged lid. When the spring was bent down the lid was held shut; when the spring was liberated, it flew up with great force, throwing the imprisoned bird into the air.

In this connection, I have noticed that the wild pigeon, when thrown into the air, quickly righted itself and made a bee line for the woods; but the domestic bird, when liberated under similar circumstances, made for the nearest building.

Those birds that were fortunate enough to escape at the trap, had to run the gauntlet of boys and others who shot them when they flew out of bounds, so that few escaped. The wild pigeon was a much more difficult bird to shoot on the wing than the domestic one.

I have seen the birds sell, when in danger of spoiling, as low as 25 cents per dozen in Cincinnati market, but 50 cents to \$1.00 per dozen was the usual price. All kinds of game was plenty and cheap in those days. Wild ducks and geese were so abundant at times that they were a drug on the market, and could be bought very cheaply.

Cone & Barr, the pigeon trappers, when in Cincinnati, made headquarters at J. B. Owing's game store, which at that time was on the south side of Fifth Street, opposite where the Government Building now stands.

When the Zoological Gardens opened, in 1875, they had a fine bunch of wild pigeons—about 22 birds. Gradually these have died, one by one, until now but two veritable patriarchs remain. At first a few were reared in the garden, but as the birds became older, though they made nests and laid a few eggs, none were hatched, as the eggs were no longer fertile. During the last twenty years I have heard rumors of the return of the wild pigeons, but whenever I have investigated these stories, have found them without foundation, generally

referring to another bird. A few scattered bunches may yet be alive. I hope it is so. About eight specimens are all I have preserved, for at that time of abundance I did not think it possible that such a vast myriad could have been exterminated during my lifetime. The eight that were saved are: three in my collection, three in the Cuvier Club's, and two at the Museum of the Cincinnati Society of Natural History. Color, form and habits considered, the Passenger Pigeon was the most remarkable of the pigeon tribe. The Audubon plate of this exquisite bird is exceedingly beautiful and lifelike. The unspeakable cruelty of the method by which these birds were so ruthlessly butchered, is a blot on the fair page of ornithological history in this country. The parent birds were trapped at their nesting places while brooding their young, leaving the helpless babies that had escaped the butchers to suffer a slow death by starvation.

Those who would read more in detail of how the wild pigeons were destroyed, are referred to a book by W. B. Mershon, entitled "The Passenger Pigeon" (Outing Publishing Co., 1907).

One foggy day in October, 1884, at 5 A.M., I looked out of my bedroom window, and as I looked six wild pigeons flew down and perched on the dead branches of a tall poplar tree that stood about one hundred feet away. As I gazed at them in delight, feeling as though old friends had come back, they quickly darted away in the fog, the last I ever saw of any of these birds in this vicinity.

* * * * *

Ten months after the publication of Dury's paper, the male of the pair of "venerable patriarchs" he describes above died at the Cincinnati Zoological Gardens. His mate, "Martha," followed him in 1914, the last known passenger pigeon in existence. Ohio was also the site of the last known wild passenger pigeon, shot by a boy in Pike County in 1900, as cited in the Dawson excerpt. Martha's remains now reside in the Smithsonian Institution in Washington, D.C.; the Pike County bird, dubbed "Buttons" because the taxidermist used buttons instead of glass eyes, can be seen on display at the Ohio Historical Center in Columbus. Christopher Cokinos has a fine chapter on this species, containing a lot of original research, in his work on bird extinctions.

Dury was not alone in his inability to imagine that the numberless throngs of pigeons might ever vanish from the earth. Ohio had had another role to play in the life and death of these birds. In 1857 a bill was introduced in the Ohio Legislature to protect passenger pigeons. The bill did not pass, in part because a select committee of the Ohio Senate issued a report, saying in part "The passenger pigeon needs no protection. Wonderfully prolific, having the vast forests of the North as its breeding grounds, traveling hundreds of miles in search of food, it is here today and elsewhere tomorrow, and no ordinary destruction can lessen them, or be missed from the myriads that are yearly produced." —Ed.

Literature Cited

- Cokinos, C. 2000. *Hope is the Thing with Feathers: A Personal Chronicle of Vanished Birds*. Tarcher/Putnam, New York.
- Dawson, W.L. 1903. *The Birds of Ohio: A complete scientific and popular description of the 320 species of birds found in the state*. Wheaton Publishing Co, Columbus.
- Dury, C. 1910. The Passenger Pigeon: A Reminiscence. *Journal of the Cincinnati Society of Natural History* 21:52-56.
- Hornaday, W.T. 1913. *Our Vanishing Wildlife: Its Extermination and Preservation*. New York Zoological Society. New York.
- Kirtland, J.P. 1838. Report on the zoology of Ohio. *Second Annual Report, Geologic Survey of the State of Ohio*. pp. 157-200.
- Wheaton, J. M. 1861. Catalogue of the Birds of Ohio. *Ohio Agric. Rep. for 1860*: 359-380. Prepared with the assistance of Messrs. John Kirkpatrick, R. K. Winslow, and Dr. J.P. Kirtland .
- _____, 1882. Report on the birds of Ohio. *Ohio Geol. Survey Bull.* 4:187-628.



Casey Tucker found this object in a Columbus antique shop, and contributed this photo. It appears to be a "stool pigeon," a replica such as Ohio hunters employed to lure passenger pigeons. Hunters also employed live birds, sewing their eyes shut, for the purpose.

Mill Creek Wildlife Sanctuary: Transforming a Fish Farm into Habitat for Migrating Shorebirds

by Bill Jones
9846 Callawoods Dr.
Canfield, OH 44406
trogon@aol.com

Northeastern Ohio is not on a major shorebird migration route. These migrants, however, do pass through this area in considerable numbers in spring, and in late summer and fall. For these birds, stopover places for feeding and resting south of Lake Erie are scarce indeed, and as birders are well aware, even the southern Lake Erie shore is far from reliable as shorebird habitat. Water levels in many inland lakes and reservoirs in Ohio are controlled by various governmental and private interests, but none that I am aware of is purposely managed for the benefit of migrating shorebirds. Water levels are adjusted for flood control, boating, and water service to surrounding communities, but only occasionally and coincidentally do draw-downs occur during the important April/May and July-October shorebird migrations. An example of such a site is the portion of Berlin Reservoir north of Alliance that is bisected by Rt. 225. The Corps of Engineers opens the dam on its own variable schedule to allow water to run downstream into Lake Milton. This adjustment only occasionally coincides with the summer/fall shorebird migration; when it does, the water level drops so quickly that much of the exposed mudflats dry out almost immediately, thus rendering them of little value as feeding grounds. The author has paddled a kayak throughout this area during drawdown and has discovered that the exposed lake bottom is of little value anyway; it is primarily clay, where little vegetation occurs that creates the detrital mass necessary for a good population of the invertebrate prey that shorebirds require. As some local birders are aware, however, there have been years when rare circumstances have brought many shorebirds to this area – an indication that if you build it, they will come. Another example is the major construction project at the end of Norton Rd. in Trumbull County that began as a fish farm but was restructured, at great expense, into a waterfowl hunting area with little or no regard for the shorebirds that stopped there in the past. It was this lack of high-quality shorebird habitat that inspired an experiment to transform a 250-acre fish farm in southern Mahoning County into a wildlife sanctuary – with a primary emphasis on creating habitat for migrating shorebirds.

We expected to learn whether enlarging and restructuring the mudflats and increasing the populations, densities, and diversity of shorebird prey species would appreciably increase the numbers and variety of shorebird species here on the fringe of the main flyway, and extend the period of time they spend on the site. We also planned to determine whether the results of improvement would justify the cost in time, volunteer labor, and money.

This project first required several months of research, not only to

study methods for creating this kind of habitat, but also to assess risking the considerable effort and resources necessary for a relatively small project on behalf of migrant shorebirds. Research included literature searches as well as inquiries to many ornithological mailing lists, which resulted in invaluable responses from around the world, including one encouraging response from Hawaii that described the transformation of a fish farm into a significant shorebird stopover site. Although there is considerable literature on structuring saltwater habitat, sources of specific information on manmade freshwater shorebird habitat are scarce. In the sources I did find, there was considerable disagreement regarding methods for managing man-made shorebird habitat. This is understandable, as this remains a rather inexact science. Many opinions differ as to timing for flooding and drawing down impoundments. We have followed majority opinions and worked from our growing experience in our specific location. At least to some extent, therefore, we are exploring new territory, and our research culminated with a multiyear plan for the project. Below are the results of having followed this plan for approximately two years.

The rich history of this strikingly beautiful parcel has been useful in our work. A hundred years ago, Mill Creek, which forms the entire eastern boundary

of the site, was channeled for several miles in order to run along a township line and to facilitate agriculture. The creek has since returned to some of its original bed, and we are still discovering places in the Sanctuary through which the creek originally flowed. When Drs. G. William Richter and William Baker, Mr. Cal Keppler, and other members of the locally historic Grant Cook Bird Club studied the birdlife on what is now Mill Creek Wildlife Sanctuary (MCWLS) during the 1940s and '50s, it was part of a floodplain bordering several miles of Mill Creek. The property was then owned by the Haus family, who had emigrated from Germany circa 1906 and later purchased part of the property from the Shank family who, among other things, had raised ponies on the land. The Haus family ran a dairy farm on the property and tried briefly to pasture cattle on the floodplain where the shorebird habitat is now, but soon discovered that repeated flooding and generally wet conditions made this impossible and thereafter kept the cattle up on the western slope. They also rented much of the land for pheasant, waterfowl, and probably rail hunting.

When William Calvin, the son of the dairy farmers, purchased the



land in the mid-fifties, he constructed dikes on the southeast portion to contain a pay fishing pond, augmenting this income with mink and muskrat trapping. In addition his family grew asparagus on top of the hill nearly fifty years. It was during this period that many of the breeding records on the site, such as large numbers of gallinules and rails, were reported by Richter and Baker. The next generation of Calvins, William, Richard and Timothy, maintained the pay fishing and hunting operation but gradually began stocking more fish, which they netted and sold. This occupation evolved into a full-scale fish-farming business, which led to the construction of several more impoundments. By the time Richard and Timothy Calvin, who owned the property at the time, signed a conservation easement in 2004, the business had been gradually scaled back to a point where the original ponds were little used for raising fish and had begun to revert to a natural wetland state. Hunting and fishing had also nearly ceased by this time. After several years of negotiation and fund raising under the direction of Susan Dicken, the environmentally-minded Director of Mill Creek Metroparks, the park system purchased the entire parcel on 23 August 2005. MCWLS now serves as a much-needed buffer zone against rampant development for Mill Creek which runs south from the sanctuary though the original 107-year-old Mill Creek Park.

Although the MCWLS project is still in its early stages, the past two years have taught us that providing necessary invertebrate habitat by constantly



adjusting water levels is a long, ongoing experiment. We have already discovered, however, that it is possible to attract shorebirds in sufficient numbers to justify the initial labor and expense involved. While continuing the project, we are constantly aware of other goals compatible with creating mudflats for shorebirds, e.g. increasing the overall native – especially avian – biodiversity on this parcel. Nor have we, importantly, done harm

to any other native flora or fauna.

Despite our emphasis on shorebirds, the interdependency of so many resident species with the hydrology of the area was apparent. Although the approximately one hundred forty acres of floodplain is the primary focus here, MCWLS also provides one hundred fifteen additional acres of upland grassland, meadows, pine plantations, large hardwood lots (which we hope to connect with wildlife corridors), many native brush areas, and three relatively undisturbed wooded ravines through which run the creeks supplying much

of the water for the shorebird habitat. This creek hydrology is critical for flooding impoundments because it is doubtful that rainfall runoff would supply sufficient water for large-scale flooding – an extremely important consideration in the creation of any shorebird habitat. The upland also provides emergency water supplies from several smaller ponds, formerly used in the fish farming operation, from which water can be pumped into the shorebird impoundments during unusually dry periods. These upland systems are spread along on a long twenty-five degree slope and, being mostly self-sustaining, will require only a few years of persistent effort to remove relatively small stands of non-native buckthorn, Japanese knotweed, multiflora rose, and other less invasive plants. The property is bound on the north in part by a canal and in the upland by a creek running through meadows, and on the south by unpaved Calla Road. This road was abandoned by the county in the sixties, and is now gated and happily greatly limits access to the Sanctuary. A narrow woodlot running the length of the property at the highest elevation forms the western boundary, and Mill Creek forms the eastern boundary. All the property bordering the east side of the creek is a wetland owned for many years by a duck-hunting club, and at least for now provides an excellent buffer for MCWLS. These combined smaller ecosystems within the boundaries are the source of a bird list averaging well over one hundred species per year over the last decade, including conspicuous species such as nesting bald eagles, visiting American white pelicans, and sandhill cranes. The historical bird list for the property, begun in the 1940s or possibly the '30s, contains over 200 species in addition to the shorebirds, including many waders, waterfowl, raptors, rallids, larids, owls, many passerines, and others.

Although there is a history of birding on the property for over seventy years, I first began carefully tracking shorebird migrants on the property in 1995. Shorebirds appeared only when the fish farming operation required the drawdown of one of the ponds to a small pool of water from which the fish could easily be netted. The migrants included lesser yellowlegs, least sandpipers, dunlins, pectoral sandpipers, an occasional semipalmated plover, and possibly breeding spotted sandpipers. These species were observed only in single-digit numbers. The ponds were generally refilled shortly thereafter from adjacent ponds, or were allowed to refill from rain and natural drainage from the nearby slope, or even allowed to dry out completely. Accidental creation of mudflats also occurred when one of the dikes was breached due to damage from muskrat holes or from severe flooding and erosion after heavy rainfalls. Few of the serendipitous draw-downs, however, occurred during peak migration periods.

The appearance of the few shorebirds that did stop to rest and feed, however, induced us to consider creating more extensive feeding areas in a more timely fashion. Although Mill Creek Metroparks held a conservation easement at that time, the purchase of the property was not yet certain, so we were gambling at this point that our work would not be in vain. With permission from the

Calvins we began modestly and somewhat tentatively repairing and unclogging some of the existing PVC drains and inlets on 30% of the wetland, and repairing badly eroded dikes. One major leak, created by burrowing muskrats, was lowering the water level one foot per day from a large compound, and required the use of a bulldozer. The dozer was called in after a futile attempt to repair the dike with hand tools and a backhoe. Although expensive, this permanent repair proved well worth the cost. Stopping leaks, both into and out of the ponds, allowed us to fill to capacity the ponds that were seldom used for fish farming and to draw them down on schedule. As we hoped, the long-term water coverage flooded unwanted vegetation, eventually killing much of it (happily, as we discovered, including thick stands of buckthorn on low islands), and in the process created a detrital mass from dying vegetation that in turn created an ideal habitat for the proliferation of the invertebrates necessary for efficient shorebird feeding.

Flooding also encouraged native emergent plants beneficial to shorebirds and waterfowl. When these first experimental ponds were eventually drawn down, a census revealed a great diversity of the invertebrates needed to attract migrating shorebirds. Most sources describe the density required to attract shorebirds as 100 per square meter; our census revealed over 100 invertebrates per square *foot* – a very heartening turn of events. The most numerous among these included various life stages of midges, right- and left-hand snails, ramshorn snail, water strider, diving beetle, riffle beetle, spiders, earthworms, mosquitoes, and horsefly and dragonfly nymphs. Also present in lesser numbers were crayfish and terrestrial prey such as grasshoppers, flies, gnats, wasps, crickets, caterpillars, earthworms, ants, and mites.

Although much less important to shorebirds, very small fishes, frogs, and tadpoles were also abundant. Drowning out the higher, unwanted vegetation was also beneficial for the shorebirds in that they require a broad field of view in which they can feed



unimpeded and observe approaching predators. This point was vividly brought home as this writer watched, on more than one occasion, both short-eared owls and northern harriers taking advantage of “high” mounds (< three feet) and high vegetation that we had not yet removed, for concealment as they cruised low over the mudflats and, appearing very suddenly, snatched one of the few shorebirds that unwisely landed in such an area.

After the celebration of the Metroparks' outright purchase of the property in 2005, we accelerated our efforts to create shorebird habitat as the fish-farming operation ceased completely. Immediate cessation of serious human disturbance, including the exclusion of three free-running pet dogs,

eliminated one major obstacle to creating a successful shorebird staging area. The experiments described above served as models for the management of the remaining 70% of the wetland. We knew that removal of the dikes would be counterproductive, allowing water from the wetland to return to the creek bed, which because of historical channeling is several feet lower in elevation than the base of the wetland. The creek, therefore, would not naturally reflood the wetland except after extremely heavy and extended rains. We continued to repair dikes using the backhoe, leveling the remnants of some interior dikes that had eroded over years through disuse, thus forming larger, shallower, and more open impoundments that were immediately more attractive to shorebirds.

We also continued core sampling for invertebrate density and found it more than sufficient to attract and hold shorebirds for sometimes over a week in almost all areas; the presence of the same individual shorebirds over time was determined, at least approximately, by daily twelve-hour observations during much of July and August of 2006. The shorebirds that moved in and out of the Sanctuary at night could not of course be tallied. Although many prey species mentioned above were available (i.e., found within 3 cm. of the surface), bloodworms, the larval form of the midge fly, are the most important. The significance of this chironomid species deserves some elaboration. Although diversity of invertebrates is important, it has been shown that the most significant prey for migrating shorebirds in the Midwest is bloodworms. Shorebirds feed heavily on these abundant, bright red larvae because they are the largest and easiest to catch. Several studies have shown that midge larvae are often – as is true in the MCWLS – the most abundant prey because of their adaptability to the great variations in wetland habitats, including extreme temperatures (even freezing), drying, and low oxygen, and thus have radiated into a great variety of niches in wetlands. The timing of the four life stages of these midges varies greatly with latitude; in the Midwest more than one generation may be present at the same time. Therefore there can be a nearly constant supply of the larval bloodworm stages throughout the shorebird migration months. Additionally, while the egg, pupa, and adult stages of chironomids can pass within days, midges spend most of their lives as larvae. These highly visible bright red bloodworms can grow as long as 24 mm and are among the earliest colonizers of new habitat, making them prime targets of shorebirds. To increase the supply of bloodworms and other prey species even further, our spring and summer drawdowns are done as slowly and steadily as possible in order to maintain constant and near perfect habitat for these prey species.

In addition to the problems with upland plants discussed above, the more common of the Ohio non-native, invasive wetland plants (purple loosestrife *Lythrum salicaria*, narrow-leaf cattail *Typha angustifolia*, and common reed *Phragmites australis*) covered approximately twenty percent of the wetland at the outset of our work. All three of these species had expanded rapidly during the years before the purchase and, unchecked, within a few more years would have taken over most of the wetland, rendering it useless as

shorebird habitat and providing little benefit to most other native wildlife.

Purple loosestrife was laboriously eliminated almost completely by cutting clumps near the base and carefully painting the stumps with undiluted glyphosate (marine-species-safe Rodeo). Hereafter, we need only occasionally pull re-emerging single plants. The narrow-leaf cattail and phragmites, on the other hand, were too widespread to eliminate manually. We simply sprayed the less invasive phragmites on windless days with the recommended solution of glyphosate, a surfactant adjuvant and blue dye, and during 2005 we managed to kill all except a few small patches that were easily eliminated in 2006. Although phragmites has appeared sparsely in an adjacent area in 2007, we expect to control it easily. In late summer of 2006, during an optimum period for elimination, along with deadheading, I began testing several spraying and large-scale mass and hand-wicking methods on marked plots of the cattail, the most widespread invasive, in order to determine the effectiveness of treatments in the summer of 2007. Finding the kill rate to be about 75%, we continued spraying and wicking appropriate patches with a stronger solution of glyphosate as manpower permitted in August of 2006 and, at this writing, we are awaiting the results of this effort. We will never completely eliminate the cattail, but the growth that survives treatment, along with abundant native burreed, knotweed/smartweed, and other species will continue to provide habitat for rails, coots, moorhens, bitterns, sparrows, marsh wrens and other species. Reluctant to use it at all, we took great care, of course, to use as little herbicide as possible and still do an effective job of eliminating highly invasive, non-native plants. These efforts have already opened up an additional thirty acres where water levels could be controlled to create constant wet earth and shallow water habitat for shorebirds and space for additional beneficial native plants to emerge.

In the coming year we will wait for periods between shorebird visits dry enough to operate a large backhoe and bulldozer to level the remains of old dikes that hold thick vegetation, thus creating even more habitat and eliminating remaining vegetation too tall for safe shorebird habitat. We also hope for conditions acceptable for shallow disking of both native and non-native overly high vegetation in order to add to the detrital mass beneficial for the proliferation of the macroinvertebrates discussed above. Also, it is becoming evident that larger more efficient drains and pumps will be needed on the larger impoundments to handle water during extremely wet or dry weather when the present equipment cannot keep pace. And, in order to monitor shorebirds and other species with as little intrusion as possible, I found that a long, straw-bale blind, built about chin high and supported by steel fence posts on a central dike intersection, works very well.

To reiterate, the results of our experiment have, at least as of the summer of 2007, been productive enough to justify continuing the time, effort and expense involved in expanding, improving, and stabilizing this wetland as a feeding and resting place for migrating shorebirds. The species occurring in the spring, summer, and fall of 2005 and 2006 and spring of 2007 included semipalmated plover, killdeer (breeding), black-bellied plover, American

golden plover, greater yellowlegs, lesser yellowlegs, solitary sandpiper, spotted sandpiper (breeding), marbled godwit, ruddy turnstone, red knot, sanderling, dunlin, pectoral sandpiper, white-rumped sandpiper, semipalmated sandpiper, least sandpiper, stilt sandpiper, long-billed dowitcher, short-billed dowitcher, American woodcock, common snipe, red-necked phalarope and Wilson's phalarope. Many of these species were present in the hundreds, most could be counted in dozens, and a few in smaller numbers, such as five marbled godwits, two red-necked phalaropes and one Wilson's phalarope. As near as I could determine, all appeared to remain on the site from at least twenty-four hours to ten days.

Other plans at the site include the introduction of many native grasses and forbs that we hope eventually will replace much of the other non-native plants not mentioned above, such as reed canary grass *Phalaris arundinacea* and goldenrod *Solidago* spp. that are expanding on the slopes. We have experimentally and selectively cut, plowed, burned, and disked test plots where a wide variety of grass and forb seeds were planted in fall of 2006. We hope this native planting will eventually bring in more shorebirds of drier habitats such as upland sandpiper and other meadow breeding species.

The Sanctuary will happily remain true to its name. No paving or construction will be done on the site, and visitations will be carefully controlled, although eventually the MCWLS should be invaluable as a nature education source for children because of its easy and convenient views of birds, including the nesting eagles and visiting American white pelicans and sandhill cranes mentioned earlier, a brief appearance of a swallow-tailed kite, and the many other forms of wildlife including mink, beaver and coyote that raise the awareness and interest of children, our future environmentalists.

Methods for expanding and improving the quality of existing wetlands or creating wetland for migrating shorebirds will vary greatly with location and conditions. It seems at this stage of this experiment, however, that larger mudflats and shallow water that contain a high diversity and density of prey species, and those in which one can control vegetation and water levels with reasonable ease and accuracy, will attract proportionately higher overall shorebird numbers and species diversity, thus possibly improving chances for the survival of these species, many of which are highly stressed during their breeding, wintering and migration periods. I believe that there are many locations in Ohio, such as abandoned fields and lakes and ponds where water levels can be controlled, which can be altered with relatively little effort and expense for the benefit of migrating shorebirds.



This bittern was seen, or missed, by many at the Shreve Migration Sensation this spring. Photo by Dave Lewis.