

WHAT'S IT GONNA BE? PREDICTING THE NEXT NEW ADDITIONS TO THE AVIFAUNA OF NEW YORK—v. 6.0

Doug Gochfeld
fresha2411@aol.com

This article was initially going to be solely dedicated to Shane Blodgett. Shane was a pillar of the New York birding community, and in addition to being a familiar figure for those around Brooklyn and New York City where he spent most of his time, he was also known throughout the entire state as a world class human being. Not only was he an extremely sharp birder with a long rap sheet of rarity finds, he also spent countless hours helping other people see rare birds in downstate New York. He passed away after a battle with cancer, shortly after these votes were compiled, and opted not to take part in this iteration, though he always liked the exercise of predicting when and where birds could show up (and then trying to find them), and he participated in the previous two polls with gusto. In July 2023, Tom Johnson, who did take part in this iteration, died suddenly, sending shockwaves and deep sorrow through the birding community and beyond. Tom set his roots in New York ornithology as a Cornell undergrad and grew over the next decade and a half into an exemplary human being and a birding giant, figuratively and literally, and a wonderful one-of-a-kind friend. Words cannot do justice to who he was and his impact on birding over his all-too-short 35 years on this planet. His death changed so much in our community, including suspending for a time the editorial process for this article. We offer it here in the spirit of curiosity and community that Shane and Tom both modeled.

“The world is changed. I feel it in the water. I feel it in the earth. I smell it in the air.” –Galadriel, *Lord of the Rings*

Galadriel wasn't talking about our planet today, but she certainly could have been. Where the changed world is perhaps most evident is in nature, and this is one of the reasons that birding has a never-ending appeal. As things change, birds adapt in both behavior and distribution, and there are forever new layers to peel back, and new things to discover and contemplate.

Eight years ago, I asked a group of New York State (NYS) birders which ten bird species that hadn't yet occurred in NYS were the most likely to be the next additions to the state bird list. Here we are, eight years and fourteen additional species on, to discuss the results with the benefit of 20/20 hindsight, as well as to try our hands at prognostication once more.

There are many factors at play in new species being added to the New York State list, and we'll discuss these before we dive into the post-mortem of the 2015 exercise (Gochfeld 2016; *Kingbird* 66 (1): 2-12) and reveal the new 2022

predictions. Much has been written about bird vagrancy (including entire books on the subject), and the many, many contributing factors, so I'll just touch on some of the basics here. New York State has seen vagrants from Asia, South America, Europe, and even potentially Africa, so there are a bevy of factors that can precede the appearance of a "Mega."

Migration and weather—Almost all the wayward wanderers to the state are migrants, and most are long-distance migrants. Birds have internal compasses, which take their cues from the Earth's magnetic field, the stars, day length, and more. If a long-distance migrant, primed to fly thousands of miles, orients to any of these incorrectly, they may set off in the wrong direction and go on an adventure that takes them far from the rest of their species. Just one of these missteps in navigation on its own can take them far out of their way, but once a migrant has taken off and is en route, a second factor has the potential to come into play: weather. Even when a bird's internal compass is correct, it may be subject to the whims of our weather. A Franklin's Gull, migrating a mile or more above the ground, may find hurricane force winds part of the way into its multi-day flight, and if it's too tired to fight against them, or not experienced enough to evade the winds, it may find itself on the wrong continent. Indeed, these high flying long distance champions have been seen in nearly every corner of the world, though 99.9% of the population successfully navigates from the Great Plains to southern South America.

Considering the above, it's easy to conceptualize why long-distance migrants are always at play for vagrancy, but there are a couple of other factors (types of vagrancy) that also figure prominently in New York's avian landscape.

Changing habitats and landscapes—Birds that may seem lost from our vantage point may not be so lost after all. Most birds are habitat specialists in at least a broad sense, adapted to live in one of forest, field, wetland, desert, ocean, etc. As habitats change, their species must adapt, either by expanding habitat preferences in order to stay put, or by moving in active search of its preferred context. In recent decades, this has been most pronounced with waterbirds who are reliant on freshwater wetlands. When these wetlands disappear, for instance during droughts, the birds that rely on them, such as herons, waterfowl, and shorebirds, are forced to re-locate. Large scale droughts are major drivers of bird displacement, and these have been more frequent, more extreme, and longer as climate change has accelerated. Over the past half decade, there has been a huge (exponential in the latter two cases) increase in records of wader species such as Wood Stork, Limpkin, and Roseate Spoonbill in our region, and it is no doubt tied to warming temperatures, as well as dryer conditions to the south. These are still currently considered out-of-range birds, but how much longer will it be until we accept them as expected and belonging here? Zooming out to the global scale, Ruddy Shelduck has a well-illustrated pattern of long-distance vagrancy, likely as a result of being both a migrant as well as a bird reliant on seasonal wetlands in regions where the effects of climate change are particularly acute. Meanwhile,

entire communities of birds move vast distances around the Australian continent year-to-year in response to rainfall and droughts, with birds responding astonishingly quickly to changing water conditions.

The ocean is perhaps the only other widespread habitat that is changing as (or more) dramatically and quickly than ephemeral wetland habitats. With sea temperature increases and ocean current changes, entire ocean ecosystems are changing and moving around, and so the seabirds that spend most of their lives following their food web are moving to adapt. The explosion of “vagrant” boobies on both coasts of North America is a great example of this. Brown Booby was an exceptional rarity in New York State waters just a decade ago. Now they are expected in small numbers each summer, seen both from shore and from boats off of Long Island, as well as wandering inland to reservoirs and lakes. Meanwhile, the upper latitudes of our planet, which used to be covered by ice year round, are now ice free for large periods of the year, allowing saltwater-dependent birds to cover much greater “ground” in their wanderings. The Northwest Passage, once the domain only of arctic explorers, is now open for much of the summer, and commercial and tourist boats have begun to ply these waters, along with birds, whales, and even plankton (one species thought to have been absent from the Atlantic Ocean for 800,000 years has appeared and become more common there in recent years, and the open Northwest Passage is hypothesized to be the reason).

Climate change is the largest driver of habitat change these days, but direct alteration of habitat by humans also can play (and has played) a role in changes in species distribution. Just take the population contraction of birds like Grasshopper and Henslow’s Sparrows, and Upland Sandpiper, in the northeast. Much of the prior century’s farmland and pasture has gone fallow over the last half century or more, turning into forest unsuitable for open country birds, while development of urban areas has likewise removed more natural habitat for grassland birds. This open country habitat had been furnished to the sparrows, Bobolinks and the like because humans had brought civilization to the land and cut the forest to install the farmland. In this case the spread of human settlement helped some species while hurting others. In the case of most urban development, however, there tends to be plenty of losers, and not many winners, on the native bird front.

More generally, terrestrial ecological communities are experiencing rapidly advancing plant and insect phenology, due to warming. Budding, leafout, and peak insect abundances occur earlier in the season, changing the optimal dates for migratory arrival and breeding for untold numbers of species.

Thus, in addition to responding passively to weather events, many birds are also dispersing actively, sometimes even exploiting weather events to explore places far out of their ordinary ranges. The concept of vagrancy as active dispersal is supported by the observations that certain species are especially prone to vagrancy (for instance, Laughing Gulls migrate much shorter distances than closely related Franklin’s Gulls, but are likewise champion global vagrants), and that species whose populations are expanding at a given time are especially prone to vagrancy. It has been argued that the latter correlation is much stronger than

expected just on the basis of increased numbers of individuals available to misorient.

Detection probability—Okay, so the above factors have conspired to bring a bird which has never before been recorded in New York State to show up within the friendly confines of our borders – Great! This happens every year, but it doesn’t automatically mean that that bird’s species makes it onto the state list. First, someone has to see it. Rarities that show up in well-known birding hotspots are more likely to be seen, especially if those hotspots are easily birdable. Large tracts of habitat are harder to cover thoroughly, and habitats that are difficult to navigate or have restrictions on access, like marshes (both fresh and salt water), grassland, and large bodies of water are even less adequately covered. Places with the highest ratios of human population-to-available bird habitat (I’m looking at you, New York City) are also more likely to be well covered. Rural areas with fewer people and more habitat are, obviously, less well covered.

The second step on the path to the state list is that the finder needs to realize that the bird is of interest. With some flashy, distinctive birds this is relatively straightforward (even a non-birder would lose their shit over a male Painted Bunting), but an out-of-range *Empidonax* flycatcher could be seen by dozens of birders without being flagged as a rarity. The amount of time a bird hangs out in an area also has a strong bearing on its detection as a rarity. How many hummingbirds from the west or deep south have given birders a five second view as they shoot between one mistaken destination and the next? We’ll never know.

The third and final step is that the bird needs to be documented well enough for it to be accepted into the scientific record as fact. For an obvious bird that is easy to identify and photograph (think Crested Caracara and Roseate Spoonbill, for instance), this step is not a huge hurdle. On the other end of the scale, the ID of the state’s first documented Pacific-slope Flycatcher was confirmed after many, many experienced birders had seen it, when the results finally came back of the DNA test of its poop. Most birds fall between these two extremes in terms of ease of documentation, but the spectrum is broad.

Staying with the theme of changing times, it used to be that almost the only way a living bird (specimens found dead aside) could be added to the state list was if a birder found it (or hunter shot it), but that is no longer the case. The dramatic proliferation (and improvement) of cameras combined with the interconnection of the modern world has meant that rarities regularly come to light from people outside the birding community, often from people who don’t consider themselves birders at all. Cell phone pictures of out-of-place birds are quickly passed around to friends and acquaintances until they find their way to a birder or one of the many bird-related groups on social media (notably Facebook and Reddit), and next thing you know the local birding world is in a tizzy about a rare bird.

There is much more depth and nuance to why and when vagrants appear in the state but that level of detail is beyond the scope of this article, and so without further ado, let’s get to the predictions!

ASSESSMENT OF THE 2015 PREDICTIONS

With all of the foregoing in mind, let's look at how the 2015 predictions fared (30 ballots).

Below is a chronological list of the species added to the official New York State bird list between the publication of the 2015 article (Mar 2016 KB 66.1), and the closing of the 2022 round of voting. Photos of all these species are presented in the Photo Gallery. For all species that were among the top 10 vote-getters in 2015, the summary article published additional brief predictions for the best time and place to find these potential new additions. For the three species that made the top 10 predictions and that ended up occurring, we'll compare the prediction and outcome.

Bronzed Cowbird *Molothrus aeneus* **21 October 2015, Saint Lawrence**
59th place in 2015, 54th place in 2010.

This bird appeared at a feeder in the far northern corner of the state, about as far from the species' normal range as it could get while still being in New York (KB 66: 64). This species has undergone a steady expansion in the south of the US, from Florida to Arizona, but records north of that are still severely lacking. In the northeast there is a Maine record, a couple of Nova Scotia records, and this New York record. The next closest record is on the Outer Banks of North Carolina.
2015: 1 list (9th place) SSM

Pacific-slope Flycatcher *Empidonax difficilis* **18 November 2015, New York**
NO PRIOR VOTES.

The lack of votes for this species likely reflects the difficulty of definitive ID to "species" in the "Western Flycatcher" complex, as well as the fact that voters interested in a new *Empidonax* flycatcher had several plausible options to choose from, and were unlikely to pick all of them. Its sister taxon, Cordilleran Flycatcher, was tied for 67th place in 2010, but otherwise all other western *Empidonax* performed much better in voting. Ironically, this taxon has now occurred twice, in addition to the "Western" Flycatcher banded at the Fire Island Lighthouse in Fall 1995, which was thought to be a Cordilleran (Buckley and Mitra 2003; *North American Birds* 57: 292-304), whereas the two higher vote-getting *Empidonax* (Gray and Dusky Flycatchers) have not yet been documented in New York. The first bird aligned with Pacific-slope occurred in Central Park, and its ID was supported by a recorded vocalization, and perhaps more importantly, DNA extracted from a fecal sample (KB 67: 86-87). Birding at its absolute finest. Another likely Pacific-slope was found within New York City (NYC) limits, in Kissena Park, Queens in 2020, with recorded vocalizations. Even so, all three individuals will soon be reflected on the NYS checklist as simply "Western Flycatcher," since the species has been re-lumped with Cordilleran Flycatcher by the North American Classification Committee (NACC) as of summer 2023.

Garganey *Spatula querquedula* 5 June 2016, Seneca

13th place in 2015, 38th in 2010.

Waterfowl have been getting more attention as rarities in recent years as they have shed, rightly or wrongly, some of the stigma of having “potential escapee” attached to each occurrence of a vagrant duck or goose. This bird at Montezuma was the first accepted by the NYS Avian Records Committee (KB 67: 82-83), but a 1993 record from Genesee County was similar in context (KB 45: 75), and they join many records from around the Northeast US and Canada.

2015: 7 lists (1st place, 2nd, 5th, 7th (2), 8th, 9th) TLe, PAB, PLLe, TRe, AFa, JDC, SSi

Clark’s Grebe *Aechmophorus clarkii* 22 February 2017, Oswego

NO VOTES in 2015, 20th place in 2010.

This got a little bit of love in the 2010 voting, but was completely absent from top ten lists in 2015. This bird’s vocalizations were somewhat equivocal between Clark’s Grebe and its close congener Western Grebe, but physically it looked like a slam-dunk Clark’s Grebe without any outward signs of hybridization (KB 71: 103-104).

Inca Dove *Columbina inca* 4 December 2017, Chautauqua

58th place in 2015, 0 votes in 2010.

This was a bird coming to a private feeder and kept under wraps while present due to the homeowner preferring not to have strangers flocking to their yard (KB 68: 106).

2015: 1 list (9th place) AGu

Common Greenshank *Tringa nebularia* 5 May 2019, Suffolk

54th place in 2015, T-64th in 2010.

This ended a one-and-a-half year drought of state firsts, and was one of the bigger surprises of the recent additions (KB 69: 202-205). While it wasn’t completely unprecedented for the East Coast of North America, there were a scant few prior records.

2015: 1 list (7th place) DFu

Tropical Kingbird *Tyrannus melancholicus* 27 October 2020, Westchester

3rd place in 2015, 3rd in 2010.

One of the heavy favorites, there was a moment in 2014 when some thought this species had finally been achieved for the list—but when Manhattan’s yellow-bellied *Tyrannus* was finally heard vocalizing, it surprisingly turned out to be a Couch’s Kingbird (KB 65: 163-164). After that this prediction still took a few years after voting to come to fruition, but once it hit, it hit! Following the first, at Dobbs Ferry, Westchester (KB 71: 84), records followed in fall 2021 in Richmond County (kb 72: 2-8) and fall 2022 in Queens County (this issue, pp. 153-162), as well as a likely summer 2023 record. This pattern reflects relatively well the

predicted circumstances of eventual occurrence, which were “between mid-October and mid-November in Region 10.”

2015: 17 lists (1st place (2 lists), 2nd (5), 3rd (3), etc.)

Ferruginous Hawk *Buteo regalis* 16 January 2021, Orange

25th place in 2015, 35th in 2010.

The biggest (and some would say best) of the North American *Buteos*, there are still only a few records of this species in East Coast states, most being away from the coast as this one was. It was found during a raptor survey of the well-known winter raptor paradise that is the Black Dirt Region, and hung out for much of the rest of the winter (71: 185).

2015: 4 lists (6th place (2 lists), 10th (2))

Tundra Bean-Goose *Anser serrirostris* 12 March 2021, Rensselaer

53rd place in 2015, 27th (“Bean Goose”) in 2010.

This one was a species that was basically a Hail Mary on a couple of lists in 2015, but would have been ranked higher by the time it showed up in the state due to some recent occurrences in Eastern North America. It stayed around for just a couple of days, and became unreliable almost as soon as the word got out, though those who were very quick on the draw were able to race up and see it (KB 71: 291).

2015: 1 list (6th place) BKu

Gray-breasted Martin *Progne chalybea* 1 April 2021, Kings

NO VOTES.

There always seems to be at least one so far out of left field that it’s actually out of the stadium. This was undoubtedly New York State’s biggest rarity stunner of the past decade. For macro context, it was only the third documented record in United States history, with the prior two being Texas specimen records from...get this...the century before last (less than 30 years after the Civil War). Thankfully, this modern individual stuck around for three more days after its April Fools Day discovery, allowing for copious photo and video documentation, and even a couple of audio recordings, from some of the multi-hundred birders that twitched their way to Prospect Park in the heart of Brooklyn over the course of the bird’s 75-hour stay (KB 71: 310).

Violet-green Swallow *Tachycineta thalassina* 22 April 2021, Saratoga

2nd place in 2015, 10th in 2010.

Another long-awaited one, in the 2015 voting it moved up to second likeliest to occur, after being in tenth position in 2010. In the 2015 discussion of where to look for this species, one of the contexts cited was “spring swallow aggregations on insect-rich ponds across the state,” and that guess did indeed come true. This was long-awaited, yet unsatisfying for those birders that would have liked to chase it, since it was a one-day wonder identified from photos distributed later in the day, and attempts to relocate it were unsuccessful (KB 71: 291).

2015: 19 lists (1st place (2 lists), 2nd (2), 3rd (4), etc.)

Snowy Plover *Charadrius nivosus* 13 September 2021, Oswego

7th place in 2015, 17th in 2010.

The prognostication for 2015's #7 was that it would occur in May or June at shorebird habitat along Lake Erie or Lake Ontario. The location prediction was dead-on, but instead of a spring occurrence, this one appeared in September (KB: 72: 59). The date should perhaps not have been so surprising, as the lone Connecticut record was an October bird.

2015: 13 lists (1st place (1 list), 2nd (3), 3rd (4), etc.)

Zone-tailed Hawk *Buteo albonotatus* 2 April 2022, Kings

22nd place in 2015, 0 votes in 2010.

This was 22nd during the last round of voting, but if there had been another polling a few years later, it would potentially have been a top ten selection, since multiple individuals had almost certainly flown through the state to end up in New England and Nova Scotia, with individuals even migrating south past Connecticut hawkwatches, and then being seen again in Cape May (in two different years!) without being detected in New York in between. Since the species is so mobile, and can be mistaken for the widespread Turkey Vulture at a glance, it takes some luck and awareness to intercept a wanderer as it passes through, and that's just what happened when it was seen for a fairly short time winging its way over Brooklyn's Green-Wood Cemetery, shocking a few lucky birders who happened to be birding the cemetery that day, and then disappearing as it continued on its way (KB 72: 315).

2015: 3 lists (4th place (2), 6th (1)) PAB, CFi, JPa

Mottled Duck *Anas fulvigula* 5 April 2022, Suffolk

47th place in 2015, T-64th 2010.

The most recent pre-voting addition to the state list barely made the top 50 in the 2015 voting, and it was an admirable find and ID given the similarity of this species to both American Black Duck and the abundant Mallard x American Black Duck hybrids that are found throughout Long Island. This bird stuck around for a long time (intermittently over the course of at least a year as of this writing), which was useful to twitchers, as for many folks it took several tries to see it in its heavily vegetated pond of choice (KB: 72: 315).

2015: 2 lists (7th, 10th place) TLe, TRe

****Special mention—Graylag Goose *Anser anser* 30 January 2018**

31st place in 2015, 0 votes 2010.

This species has yet to be added to the New York State list, but a waterfowl hunter apparently took one of these on Long Island during the 2018 hunting season (KB 68: 163). Unfortunately, just a couple of photos were submitted to NYSARC, and without more context the committee did not accept the record when first submitted. This species has occurred in recent years in New England (including

in neighboring Connecticut and Rhode Island) and the Maritimes, and its population continues to grow and expand in Northwestern Europe.
2015: 3 lists (4th place (1), 10th (2)) DGo, PAB, SSI

METHODS

As in 2015, predictions were sought from a large set of birders from across New York State, plus several experts who don't currently live in New York, but have a strong knowledge of the distributions of the species that could show up (total of 48 contributors). As was done in 2015 and 2010 (*Kingbird* 60 (4): 301-310), species were ranked by both overall popularity (the number of lists featuring each species) and intensity of preference (the sum of ranks assigned to each species). The product of these two numbers yields an index that closely tracks both popularity and preference; its advantage is that it compensates for situations where the other two measures are strongly at odds with each other, such as when a species is included on many lists but always at low rank, or on just a single list but at very high rank. Thus a species selected by three contributors at low ranks of 2, 1, and 1 would achieve an index of 12 and would not be eclipsed by a species ranked highly at 9 by a single contributor. The index also breaks many of the ties that result from the other metrics, applied individually.

Contributors: Meryl Sue Ackley, Seth Ausubel, Joachim Bertrands, Shawn Billerman, Brent Bomkamp, Jen Brumfield, P. A. Buckley, Peter Burke, Thomas W. Burke, Gary Chapin, Michael Cooper, Shannon Curley, Willie D'Anna, Todd Day, Joseph DiCostanzo, Jacob Drucker, Max Epstein, Andrew Farnsworth, Shawneen Finnegan, Brendan Fogarty, Karen Fung, Douglas Futuyma, Doug Gochfeld, Robert Gochfeld, Julian Hough, Marshall Iliff, Tom Johnson, Paul Lehman, Tony Leukering, Patricia J. Lindsay, Heydi Lopes, Ryan Mandelbaum, Michael McBrien, Shaibal S. Mitra, Mary Normandia, Daisy Paul, Tripper Paul, Jose Ramirez-Garofolo, Melissa Roach, Derek H. Rogers, Donna Schulman, Sean Sime, Taylor Sturm, Richard R. Veit, Angus Wilson, Heather Wolf, Mike Yuan, Ryan Zucker.

Additional initials appearing in the 2015 recap refer to: Corey Finger, Andy Guthrie, Bob Kurtz, Jim Pawlicki, and Tom Reed.

THE NEW PREDICTIONS

The top vote-getters for 2022 were a combination of yet-to-be-fulfilled holdovers from the tops of the previous two lists as well as some newcomers that have shot up the charts due to recent changes in distribution and/or perception of their rarity. The top 15 species are discussed in detail here and presented with the votes of all contributors in Table 1. Remaining species receiving votes are presented in Table 2. As described above, they are ranked by a combination of the number of votes received and the sum of the scores.

1. Limpkin *Aramus guarana* (2015 unranked, 2010 T-73rd (last place))

The voting took place as the eastern US was in the midst of an unprecedented explosion of Limpkins north of their normal southeastern range, so it was no surprise that it garnered so many votes, since it seemed like it could appear any day. Thankfully, it had the decency to hold off on being found in New York until after all the round's votes were in.

When and where: It's already occurred, so we can't give readers the benefit of a true prediction, but it likely would have read "Summertime anywhere in the state, likely in the interior and western part." The date would have been wrong, but it made sense that it showed up closer to all of the recent Midwest US records. The Lewiston (Niagara County) record in November 2022 was astonishing more for the time of year and the microhabitat (not a big marshland or freshwater pond), but the place the bird had settled into had an abundance of invasive apple snails that the Limpkin was feasting on. A rehabber eventually picked up the bird in mid-November, and transported it to the south, since it was unlikely to survive the impending freezing weather at Niagara Falls. See *Kingbird* 73 (1): 7-14.

2. European Golden-Plover *Pluvialis apricaria* (2015 5th place, 2010 9th)

This species has been inching up in the standings as occurrences continue to straddle the state, with two New Jersey records and singles in Delaware, Massachusetts, and Maine. It has now occurred in the region in two different seasons: northbound migration in April (as is the typical pattern in Newfoundland), and July through October, presumably heading south. This hints at the potential for multiple modes of vagrancy.

When and where: July to October in Long Island or a rich agricultural area or turf farm farther upstate.

3. Masked Booby *Sula dactylatra* (2015 T-59th (last place))

This one has come close, occurring just down the parkway in Cape May and at Island Beach State Park, as well as several times in deep water off the shelf edge off Massachusetts. This species is perhaps here largely as a result of the ocean changes mentioned in the habitat section of the introduction, though increased coverage of pelagic waters and increased awareness of the possibilities out there have also played a role.

When and where: It's uncertain whether this will be first seen in New York waters from a boat (either a National Oceanic and Atmospheric Administration (NOAA) ship, a fishing boat, or a dedicated birding pelagic trip) or from shore around one of the better seawatching spots or productive inlets (Montauk, Shinnecock, Fire Island, Jones Inlet, Rockaway Inlet). It's more likely in deep water off the shelf edge, but there is much, much more coverage from shore, which evens the probabilities out a bit. Given the trends in water temperatures in recent years, a late-June to September date range is definitely the prime time.

4. Black-chinned Hummingbird *Archilochus alexandri* (2015 1st place, 2010 4th)

Ah yes, the ever-predicted western analog to our Ruby-throated Hummingbird. Many comments that came with the lists this year essentially just stated “band more hummingbirds,” when it came to predictions of this species. It hasn’t placed outside the top 4 in any of the recent Next 10 guessing games.

When and where: Hummingbird feeder or large tract of late-blooming (salvia) flowers anywhere in the state in November or December. See Postscript.

5. Allen's Hummingbird *Selasphorus sasin* (2015 4th place, 2010 2nd)

Almost a repeat of the prior species, though perhaps even more difficult to identify with certainty when it’s not in-hand. Plenty of Rufous Hummingbirds, its closest relative, show up in the state, and the range of Allen’s may be expanding quickly (and they are also now...gulp...hybridizing with Rufous Hummingbirds).

When and where: Hummingbird feeder or large tract of late-blooming (salvia) flowers anywhere in the state in November or December.

6. Heermann's Gull *Larus heermanni* (unranked previously)

Like Limpkin, this species was in the midst of an unprecedented run of records along the east coast shortly before and during the voting, with multiple birds being seen roving the sea shore between Florida and Massachusetts, and so almost certainly (à la Zone-tailed Hawk) passing through New York State (or at least its closest-point-of-land waters) undetected. Many of these votes were in large part anticipating that one of these two or more known individuals would wander into the state sooner or later.

When and where: It took until May 2023 to occur, and it was not in the location that would have been predicted, which would have been an ocean-facing beach on Long Island. It may not have even been one of the wandering individuals people had in mind. This one was likely the bird that had been seen for a couple of days along the Lake Erie shoreline in Ohio a month prior to being spotted at Sodus Bay, NY. Before this occurrence, the prediction here would definitely have been along the south shore of Long Island and around New York Bay.

7. Yellow-green Vireo *Vireo flavoviridis* (unranked previously)

There have been six records in the Northeast US (five since 2018, the other in 2011), all coastal. Of those, four were found in mist nets as part of banding operations in the autumn. This species has been undergoing a vagrancy boom over the past decade, but that has mostly manifested on the west coast. In the east, this species is more likely to slide under the radar amongst the abundant look-alike Red-eyed Vireos, so this is one that will be the reward of those who don’t take their fall vireos for granted. There are not many banding stations operating on Long Island, so this one may be up to the astute field observer or, perish the thought, to those examining other peoples’ photos after the fact.

When and where: Most likely to be detected on the south shore of Long Island in September or October, though an April to May appearance should not

be ruled out. If there were regular bird banding projects along the coast it would likely expedite the detection of this potentially skulky Red-eyed Vireo lookalike which could bury itself in dense, hard-to-access coastal scrub.

8. Bermuda Petrel *Pterodroma cahow* (2015 8th place, 2010 49th)

This one, like several pelagics, had been climbing the ranks, and had for the second time in a row cracked the top 10 just before last October's magical pelagic trip where this rarest of rare Atlantic *Pterodromas* graced a boat full of birders with its presence.

When and where: This occurred exactly as it would have been predicted, on one of the overnight pelagic birding trips off Long Island, of which Brooklyn has been the only port in recent years.

9. Carolina Chickadee *Poecile carolinensis* (2015 10th place)

This species lives year round just across New York Bay from New York City (NYC). The species' range has been inching northward over the past couple of decades, and with it a hybrid zone between Carolina and Black-capped. Any putative Carolina Chickadee would have to be closely scrutinized (both visually and audially) to rule out a hybrid.

When and where: People have prognosticated Staten Island for this species for a long while, but it might make more sense reaching the state northwest of there, where it wouldn't have to fly across a river towards a large metropolis. No dates seem any more likely than others, but perhaps a post-breeding dispersal in the second half of the summer or autumn would make the most sense. Either that or the northern edge of the range continues its very slow march northward and it eventually gets to Rockland or Orange Counties. Bird feeders in the southern and western part of Staten Island would perhaps be the best bet for those holding out hope for an appearance from the most proximal population.

10. Mexican Violetear *Colibri thalassinus* (2015 17th place, 2010 5th)

This species has stayed pretty consistent in the voting over the past decade plus. It's big advantage over the other most likely vagrant hummingbirds is just that: it's big. It's also patterned very differently than any other hummingbirds, so it should be obvious to any hummingbird feeder watcher. There are at least eight records from the mid-Atlantic north, one of which was merely 10 miles from NYC (in New Jersey), and another which was only ~20 miles from Dutchess County (in Connecticut), so we are well and truly primed for this one.

When and where: Another hummingbird feeder target, though this one is most likely to occur between August and October. They usually only stick to feeders in this region for between one and three days. This combined with the fact that most hummingbird feeders are at private homes means it's possible that not many people would get to lay eyes on one that did show up. There is a spray of records through the Appalachians, so if you live near that range and have hummingbird feeders out in the summer, keep an eye out for a big and fancy one!

11. Prairie Falcon *Falco mexicanus* (2015 11th place, 2010 38th)

This massive falcon of open country has been recorded in winter in Vermont (just over the border from New York), Pennsylvania, and Washington D.C., and there are several records from southern Ontario. There are also lots and lots of records from the Midwest.

When and where: Look for this to set up shop in a vast grassland area, perhaps with a ready supply of waterfowl, in upstate or western New York. Montezuma NWR or other large waterfowl concentration points (several WMAs fit the bill), or vast agricultural areas (the Black Dirt Region qualifies if you want a closer-to-downstate option) seem like perfect places for a Prairie Falcon to spend a month or two during the coldest season.

12. White Wagtail *Motacilla alba* (2015 29th place, 2010 60th)

There was a tantalizing report of one from Brooklyn in the early 1990s, but given that it was only seen in flight, and that not all observers on site agreed on the ID, it will forever be relegated to the halls of uncertainty. That said, the species is a long distance migrant, has a huge Old World distribution (involving many taxa), and is common throughout that range, so the source population is a great plus-factor for vagrancy. There are quite a few April records surrounding our latitude, apparently of birds that had already been wintering on the continent and were making their way north to the American arctic and subarctic to set up territories away from the prying eyes and ears of people. There are also some October records, and farther south there are some winter records.

When and where: It's tempting to say any time and anywhere given its abundance in the Old World, but October-April would be the best pick for timing, and water's edge the most likely habitat. It should either be along coastal Long Island or the southern Lake Ontario shore, though the Hudson and St. Lawrence Rivers shouldn't be ruled out either. Check your breakwalls, jetties, and rocky or seaweed-strewn beaches!

13. Brown Noddy *Anous stolidus* (2015 23rd place, 2010 24th)

There is scant documentation of this species' occurrence in the Northeast. Even in the Gulf Stream off North Carolina, where there has been regular dedicated birding pelagic coverage for the past three decades, there are only a handful of records. This is perhaps one that has the benefit of association with other tropical waterbirds which occur in the region regularly during storms. Care must be taken to eliminate juvenile Sooty Tern, and to account for poor lighting when people think they see an all dark tern that they suspect to be a noddy.

When and where: This one would most likely be a storm-transported species to New York coastal waters, and looking for it (safely) after the passage of a hurricane that comes directly from the Caribbean is the best bet. Lucking into one in very warm waters far off shore also may be getting more likely by the year, as sea surface temperatures in the north Atlantic skyrocket.

14. Steller's Sea-Eagle *Haliaeetus pelagicus* (unranked previously)

Make no mistake, this is a vote for an individual rather than a species. Another result of recent circumstances, these votes were for the Steller's Sea-Eagle that has taken up residence in the Maritimes (between Newfoundland and Labrador in the summers) and farther south (regularly as far south as Maine in the winter, and even down to Massachusetts for a few days), and seems to be in Northeastern North America to stay.

When and where: The deepest of winter is when New York's hopes for this bird should be highest, and if judging by its winter habitat preferences so far, the options seem to be large systems of reservoirs (à la the NYC reservoirs in Putnam and Westchester Counties), or coastal areas and large rivers with trees or rocky coasts and outcrops. The Hudson River seems to fit the bill well, especially in cold years with lots of ice in the river. Coastal Long Island is dominated by salt marsh on the south shore, so a Long Islander's hope for the bird might best lie on the north shore, along the Long Island Sound.

15. Barolo Shearwater *Puffinus baroli* (2015 6th place, 2010 33rd place)

Several records in Massachusetts waters, and regular in waters off Nova Scotia.

When and where: This one will need photos due to its similarity to other species of small shearwaters, so it's most likely to be seen on either an organized birding pelagic trip or a NOAA research vessel where birders are prepared and alert. The time window to target for them is August or September.

The Next 5 breeders—The state breeding bird list is augmented at a much slower pace than the overall bird list is, for plenty of good reasons. Breeders are most likely to appear in one of two ways: a breeding range expands to include New York, or a new habitat opportunity opens up. Since both of these factors usually take place gradually over many years, we shouldn't expect a hot and heavy incursion of breeders. As such, not many breeders hit, and only five are asked for. Of the thirty Next 10 respondents, only ten also submitted a list of predicted breeders in 2015, and a total of 19 species appeared on those lists. The leaders were Royal Tern, Eurasian Collared-Dove (which had perhaps bred already), White-faced Ibis (speculated to have bred previously, but no conclusive evidence), Neotropic Cormorant, Lesser Black-backed Gull, Carolina Chickadee, Manx Shearwater, Brewer's Blackbird, and Kirtland's Warbler. Nearly half of these aren't recorded even annually in the state, and so are clearly being pegged as species whose breeding ranges are expanding.

The 2022 predictions look very similar to the 2010 predictions, reinforcing just how slowly this list is apt to change. 26 of the 48 participants submitted a list of breeders for this year, mentioning a total of 37 different species.

White Ibis made a huge jump to the overwhelming #1 favorite. Of the seventeen voters who listed it, 16 had it as their first or second most likely, showing a very high level of confidence from those who were on Team-WHIB. The next bunch look familiar, with **Royal Tern, Black-necked Stilt, White-faced Ibis, Eurasian Collared-Dove, Black-bellied Whistling-Duck, Lesser**

Table 1. Predicted additions to the New York State Checklist. Contributors (see Methods for full names) ranked 10 species each. # = the number of lists featuring the species; sum = sum of ranks assigned to each species; species are ranked by # * sum.																	
Species	MSA	SA	JoBe	SBI	BBo	JeBr	PAB	PeBu	TWB	GC	MC	SC	WDA	TD	JDC	JDr	ME
Limpkin	9			7	6	6	10			9	10	10	8	8			10
European Golden-Plover		8	4	9	2				2	4	6	5	4			5	8
Masked Booby	6	9			8				1		4		3		9	6	7
Black-chinned Hummingbird		10		8	9	9	7	7	6		7	9	10	10	1		
Allen's Hummingbird				10	10		4		9	6			2	9		7	
Heerman's Gull	10			6			9			8	8		7			8	9
Yellow-green Vireo	8	7				3	1							7		9	4
Bermuda Petrel		3							10						10	3	5
Carolina Chickadee			9				6		5	10	1	2		1	7		
Mexican Violetear			3			10		3		7			6		2		
Prairie Falcon		6	1	4	5	4									3		
White Wagtail	1				3							6	1	6			
Brown Noddy											5				8		
Steller's Sea-Eagle				3					8								
Barolo Shearwater				1	7				3	2			5				
Brewer's Sparrow				5													
Arctic Loon						7											
Graylag Goose							8			1	9						
Black-whiskered Vireo	5				1		2									4	
Gray Flycatcher						5		9									
Glaucous-winged Gull	7					1											6
Sprague's Pipit							5										
Great-tailed Grackle								5			2	7				10	
Shiny Cowbird															6		
Gray Heron														3			
conformity	7	6	4	9	9	8	9	4	8	8	9	6	9	6	8	8	7

Table 1. Predicted additions to the New York State Checklist--contd.																	
Species	AFa	SF	BFo	KFu	DFu	DGo	RG	JH	MI	TJo	PLe	TLe	PJL	HLo	RM	MMcB	SSM
Limpkin		10		8					3	7		10	8	5	9	10	8
European Golden-Plover	5		8	4		7		9		8	9	5		10	3	2	9
Masked Booby		6			8	8			9	9	7				2	8	
Black-chinned Hummingbird				9					8	10			9		7	6	
Allen's Hummingbird		8		6				10	10	5	8				10	9	
Heerman's Gull		2		10					6				7	8	8		
Yellow-green Vireo	7	9	5	5		9		7	5	6	10						
Bermuda Petrel				2		10	6		7	4			3		1		
Carolina Chickadee				7	1		5						10			5	4
Mexican Violetear	4	7						1			4		5	9	5		
Prairie Falcon					5		10					6					5
White Wagtail						5		5									
Brown Noddy	9				10												
Steller's Sea-Eagle							8							6			
Barolo Shearwater	1	5															10
Brewer's Sparrow				3				8				3		2			6
Arctic Loon			9					4			3	9		1			
Graylag Goose										2					4		
Black-whiskered Vireo	6								2								
Gray Flycatcher																	7
Glaucous-winged Gull										3							
Sprague's Pipit	8				4								6				
Great-tailed Grackle												8					
Shiny Cowbird			10		2												
Gray Heron										1							
conformity	7	7	4	9	6	5	4	7	8	9	6	6	7	7	9	6	7

Table 1. Predicted additions to the New York State Checklist--contd.																	
Species	MN	TP	DP	JRG	MR	DHR	DS	SSi	TS	RRV	AnW	HW	MY	RZ	#	Sum	Rank
Limpkin		10	7	9	10		8	10	8		10	8	10		31	261	1
European Golden-Plover		5		6	4		10	9	9	7			6		31	192	2
Masked Booby		6	3	10	8	3		7			8				24	155	3
Black-chinned Hummingbird				7				6						10	21	165	4
Allen's Hummingbird		8	5		9	10	9								21	164	5
Heerman's Gull		9					6				9		9		18	139	6
Yellow-green Vireo		2			7									7	19	118	7
Bermuda Petrel		1			1			3	7		5		7	6	19	94	8
Carolina Chickadee							2		10			10			17	95	9
Mexican Violetear		3							3	8	4				17	84	10
Prairie Falcon	8	7	8					4						2	15	78	11
White Wagtail			9	4										1	10	41	12
Brown Noddy								2				5	3	3	8	45	13
Steller's Sea-Eagle	10										6		8		7	49	14
Barolo Shearwater						4									9	38	15
Brewer's Sparrow					6			8							8	41	16
Arctic Loon						6									7	39	17
Graylag Goose						9			4						7	37	18
Black-whiskered Vireo										3				9	8	32	19
Gray Flycatcher		4	10							5					6	40	20
Glaucous-winged Gull									5		7			5	7	34	21
Sprague's Pipit					3		1		6						7	33	22
Great-tailed Grackle											3				6	35	23
Shiny Cowbird											2		5	8	6	33	24
Gray Heron			6	8	2	2			2						7	24	25
conformity	2	10	6	5	8	5	6	8	8	4	9	3	7	9			

Table 2. More predicted additions to the New York State Checklist—v. 6.0.

Species	#	Sum	Rank	Contributors
Eurasian Tree Sparrow	5	32	26	MC, WDA, RG, MI, HLo
Black-browed Albatross	5	26	27	JDC, RG, JH, TLe, DS
Lesser Sand-Plover	5	23	27	SA, PeBu, JH, DS, SSi
Whiskered Tern	5	22	29	SA, TLe, PJL, HLo, DS
Terek Sandpiper	4	26	30	JoBe, AFa, TJo, HLo
Broad-tailed Hummingbird	4	23	31	TD, DFu, MMcB, DHR
Groove-billed Ani	4	20	32	PeBu, SC, ME, RM
Snail Kite	4	20	32	MSA, SC, DP, HW
Thick-billed Longspur	4	19	34	SA, TWB, BFo, DHR
Eurasian Kestrel	4	18	35	PLe, MN, DHR, DS
Black-throated Sparrow	4	17	36	PeBu, ME, DFu, SSM
Variegated Flycatcher	5	13	37	GC, TD, AFa, AnW, RZ
Western Wood-Pewee	4	13	38	BBo, JDr, DGo, MY
Mediterranean Gull	3	15	39	JoBe, JRG, RRV
Dusky Flycatcher	3	12	40	MSA, PAB, PLe
European Storm-Petrel	3	12	40	TWB, JRG, DHR
Common Redshank	3	11	42	JeBr, PJL, MMcB
Great Kiskadee	3	10	43	WDA, DP, HW
Cordilleran Flycatcher	2	14	44	DFu, MMcB
Lesser Goldfinch	2	12	45	SF, HW
Lesser Nighthawk	3	8	45	JoBe, TLe, MY
Black Swift	2	8	47	PeBu, AFa
Great Knot	2	8	47	JoBe, JRG
Yellow-legged Gull	3	5	49	SC, PLe, SSM
Buff-bellied Hummingbird	2	6	50	GC, KFu
Cassin's Finch	2	6	50	BFo, RG
Tufted Puffin	2	6	50	JoBe, HW
Hepatic Tanager	2	6	50	JH, SF
Common Shelduck	1	10	54	RRV
Yellow-browed Warbler	2	5	54	DGo, RRV
Eurasian Hobby	2	5	54	MN, DP
Common Sandpiper	1	9	57	DFu
Common Wood-Pigeon	1	9	57	RRV
Lucy's Warbler	3	3	57	SF, PLe, SSi
Mountain Plover	1	7	60	HW
Eurasian Marsh Harrier	1	7	60	MN
Flammulated Owl	1	7	60	BFo
Dusky Thrush	1	7	60	JoBe
Black Kite	1	6	64	MN

Table 2. More predicted additions to the New York State Checklist—continued.

Species	#	Sum	Rank	Contributors
Sulphur-bellied Flycatcher	1	6	64	BFo
Gray-tailed Tattler	2	3	64	SBi, ME
Eurasian Sparrowhawk	1	5	67	MN
Red-footed Booby	1	5	67	JRG
Marsh Sandpiper	1	5	67	MR
Rock Ptarmigan	1	4	70	RG
Phainopepla	1	4	70	PeBu
Brown-crested Flycatcher	1	4	70	MSA
Hooded Oriole	1	4	70	TD
White-chinned Petrel	1	4	70	JDC
Swainson's Flycatcher	1	4	70	RRV
Piratic Flycatcher	1	3	76	DGo
Whooping Crane	1	3	76	RG
American Flamingo	1	3	76	HW
Short-tailed Hawk	1	3	76	MN
Cape Verde Shearwater	1	3	76	MMcB
Common Snipe	1	2	81	DGo
European Robin	1	2	81	HW
Pacific Wren	1	2	81	MY
Hen Harrier	1	2	81	MN
Gray Vireo	1	2	81	BFo
Southern Martin	1	2	81	RRV
Vaux's Swift	1	2	81	JeBr
Common Swift	1	1	88	DGo
Common Cuckoo	1	1	88	SA
Small-billed Elaenia	1	1	88	JDr
Blue-footed Booby	1	1	88	RG
Common Scoter	1	1	88	PeBu
Red-footed Falcon	1	1	88	MN
Velvet Scoter	1	1	88	MI
Siberian Rubythroat	1	1	88	BFo
Steller's Eider	1	1	88	PJL
Bluethroat	1	1	88	TS
Red-throated Pipit	1	1	88	SSM

= the number of lists featuring the species; sum = sum of ranks assigned to each species, with 10 being highest likelihood and 1 lowest. Species are ranked by an index computed as the product of # and sum. See Methods for full names of contributors.

Table 3. Predicted new breeding species for New York State—v. 6.0.

Species	#	Sum	Index	Rank
White Ibis	17	74	1258	1
Royal Tern	10	35	350	2
White-faced Ibis	9	26	234	3
Black-necked Stilt	8	26	208	4
Eurasian Collared-Dove	7	25	175	5
Black-bellied Whistling-Duck	6	21	126	6
Brown Pelican	6	14	84	7
Lesser Black-backed Gull	4	15	60	8
Kirtland's Warbler	4	12	48	9
Carolina Chickadee	4	10	40	10
Yellow Rail	3	9	27	11
American White Pelican	3	9	27	11
Nelson's Sparrow	3	6	18	13
Manx Shearwater	2	9	18	13
LeConte's Sparrow	3	4	12	15
Swallow-tailed Kite	2	6	12	15
Neotropic Cormorant	2	5	10	17
American Avocet	2	5	10	17
Fox Sparrow	2	4	8	19
Pine Grosbeak	2	4	8	19
Bell's Vireo	2	3	6	21
Scissor-tailed Flycatcher	2	3	6	21
Greater Scaup	1	5	5	23
Bufflehead	2	2	4	24
Little Egret	2	2	4	24
Brewer's Blackbird	1	4	4	24
Gray-cheeked Thrush	1	4	4	24
White-winged Dove	1	3	3	28
Red-throated Loon	1	3	3	28
Anhinga	1	3	3	28
Red-necked Grebe	1	2	2	31
Ash-throated Flycatcher	1	2	2	31
Western Meadowlark	1	1	1	33
Swainson's Warbler	1	1	1	33
American Avocet	1	1	1	33
Boreal Owl	1	1	1	33
Lark Sparrow	1	1	1	33

Black-backed Gull, Brown Pelican, Kirtland's Warbler, Carolina Chickadee, Yellow Rail, American White Pelican, Manx Shearwater, Nelson's Sparrow, and Swallow-tailed Kite rounding out the top 15. One interesting thing to note is the number of rarities that showed up on the list of predicted breeders. Around 17 NYSARC reviewable species were voted onto the Next 5 breeders lists. If these rarities were to come to pass, they could be either as part of major population-wide expansions (à la White Ibis and Black-bellied Whistling-Duck), or peripheral occurrences of species with widespread breeding populations not overly far from NY (Western Meadowlark, Le Conte's Sparrow).

DISCUSSION

A large majority of the top 20 from the 2015 voting are still out there waiting to get onto the New York State scoreboard. In fact, just six of the top 25 had been recorded before the most recent round of voting (though a seventh has subsequently occurred between voting and publication), giving us a ~25% hit rate for the species that have the highest levels of confidence and support. Meanwhile 10 of the top 20 from the **2010** predictions have still yet to occur!

Between 2016 and 2018, there were only two additions to the state list, then there was one in each of the next two years, and then all of a sudden BOOM, we got five new ones in 2021, followed by five more in 2022! Surely you would expect the rate at which new-to-New York species are being found to slow down, but this has not been observed in the past, and does not seem to be happening, even now. As this issue goes to publication in late 2023, four more state firsts have been recorded, pending NYSARC approval (see Postscript).

There are plenty of factors that can contribute to this steady increase in the state list. Not least of these is the explosion of information and interconnection, as alluded to in the introduction. The abundance of information on bird distribution and ID, as well as the awareness of what rare birds might be possible and could be looked for, are unprecedented. The proliferation of cameras has acted as an accelerant to this affect as well, making anybody who is willing to point a camera at a bird a potential finder of a first state record. Add to this the explosion of birding as a hobby after the Covid-19 pandemic struck, and bird finding in general is entering a golden era never before seen.

These changing sociological factors will likely continue to shape perceptions—and detections—of those potential vagrants that most closely resemble our common birds. The rankings of some birds, like Black-chinned and Allen's Hummingbirds (which would likely be found in settings where repeated photography and in-hand measurements are possible), have not been impacted by the formidable ID hurdles they present, but similar hurdles have undoubtedly affected the perceived likelihoods of other species, such as Black-whiskered Vireo, Dusky Flycatcher, Lesser Nighthawk, Western Wood-Pewee, Brewer's Sparrow, Carolina Chickadee, Broad-tailed Hummingbird, Common Sandpiper, Common Snipe, Common Scoter, Great-tailed Grackle, Shiny Cowbird, Cassin's

Finch, and a couple of species of old world harriers. It's also perhaps the reason why Pacific Wren, a common migrant from the west coast, has (so far) received so little love in these votes (just one 9th place vote this time around).

Taxonomic interpretations can also have a dramatic effect on detection of rarities as well as the voting in these lists. When vagrant subspecies are elevated to species status, interest in and awareness of their identification dramatically increases. The efficacy of increased awareness and motivation has been observed to a striking degree since the elevation of Nelson's Sparrow, and the principle might now be brought to bear on Pacific Wren, and on potential future splits, such as White-breasted Nuthatch and Marsh Wren. Meanwhile, when difficult-to-separate species pairs get lumped (à la Western Flycatcher), people are more likely to vote for the new species to show up, since the identification difficulty is removed as a hurdle to the species getting identified with certainty. "Western" Warbling Vireo is known from NYS from a bird banded by an observer aware of its potential vagrancy and its potential as a future split.

There has been a huge uptick in rare birds being identified after their actual field encounters via photos, whether the observer knew they had anything interesting in the field or not—and sometimes when they didn't even knowingly observe the bird. There are some never-before recorded species pairs that could be impossible to separate with certainty even from photos, such as old world swifts (good luck separating Common from Pallid with average-quality photos), *Phylloscopus* warblers (Yellow-browed Warbler and Hume's Warbler are even harder to separate visually than the swifts mentioned above), and *Elaenias* (this ID issue has reared its head in other states when comparing Small-billed to White-crested).

The specter of ever more extreme weather is one of the most acute manifestations of our broad spectrum climate change, likely promising many changes to our future avifauna. Birds are very sensitive to the environment in so many ways, and it seems clear that various species will continue to respond both passively and actively to changes in weather and climate. New York's checklist will surely continue to grow via lone birds going rogue and others on the vanguard of population-level trends. The latter are often obvious, leap-frogging the edges of a wealth of data points expanding across the map. The former can also seem obvious, but you never know in the moment whether or not something that seems like an isolated record (consider the Brooklyn Gray-breasted Martin) might prove to be the first in a future pattern. It is unlikely that the first Southern Lapwing to show up in Costa Rica set off alarm bells that they would become a common breeder through much of the country within a decade or two. At what point should the vagrant White Ibises in New Jersey have gone from being deemed merely "post-breeding dispersers" and "spring overshoots" to being seen as the sign of an impending breeding explosion?

LESSONS

What can we learn from the results of this exercise? Is there even any reason for us to spend precious brain space on this at all? I would give an emphatic “yes” to the latter question. In addition to prompting us to think outside the box, mulling the subject of new vagrants forces us to think carefully about bird distributions and the litany of factors that affect them. It draws attention to how changing climate (warming temperatures, drought, sea level rise, etc.) reshuffles birds on the planetary playing board, and when we compare these predictions to prior ones, we can see how these factors (and our perception of them) have changed over the years.

These predictions in the aggregate are basically a time capsule of the conventional wisdom of the day. Species that have large spikes one year and then drop off the next time voting comes around were likely examples of recency bias, where one or more nearby records had primed local birders to think about the species more or perceive a developing pattern. When that perceived pattern failed to materialize, the voting fervor for those species cooled down.

One prior example is Brown-chested Martin. Is this Neotropical species now any less likely to occur than it was 12 years ago when it made the top 10 (6 lists)? Conversely, there are birds that didn’t show up or were ranked fairly low in prior rankings, and have shot up this time around. Some are due to obvious population expansions or environment-induced irruptions (obvious examples being Limpkin for the Next 10, White Ibis for the Next 5), whereas others may indeed be due to recency bias: If the Steller’s Sea-Eagle eventually stops performing its yearly Maritimes-to-Maine ping pong act, our chances of having one in the state will return to pre-“Stella” levels, and it will likely see a precipitous fall on this list. For species like Heermann’s Gull, the jury is still out on whether there are just a couple of wandering individuals, or whether this is going to become a trend with more of them. By the time the next iteration of this comes around, we will undoubtedly have a better idea. Changes in status can be very rapid—Zone-tailed Hawk went from no votes, to the top 25 in five years, and by the time it occurred six years later it was considered obviously overdue by many.

There is much hearty food for thought on these lists. *Patterns of vagrancy, and expanding breeding ranges, are telling us something about the environment as well as something about the adaptability of species.*

Within the broader pattern of episodic dispersal by southern waterbirds, Limpkin illustrates the adaptive value of such exploration—vagrants pushed out of their breeding areas (for instance due to southern droughts) are discovering distant patches of habitat that have recently become appropriate for them because of both climate change and invasive snails. If they hadn’t been pushed out of their normal habitat, it’s possible that they wouldn’t have an inkling of this newly suitable swath of the country.

Another point to consider is that in the 1940s, Glossy Ibis was a mega-rarity in NY and Cattle Egret was not yet known to North American birders. Birders observed these widespread Old World species colonize the New World in real

time. And we now understand that Glossy Ibis has done this twice: the earlier event (Pleistocene) resulting in the divergence of a New World “species” White-faced Ibis; the more recent one (ca. 1880s) bringing modern Glossy Ibis back into contact with White-faced, from which it is incompletely reproductively isolated. Western Reef-Heron and Little Egret have been added to the NYS list via similar processes, and now White-faced Ibis itself is expanding “southern waterbird” style, overlapping Glossy Ibis to a much greater extent than previously, and placing itself, as is also true for White Ibis, as a contender to breed in NYS.

POSTSCRIPT

During the time between when the votes were polled and this article is being published, multiple species have appeared for their first time in New York: Sulphur-bellied Flycatcher, Bermuda Petrel, Limpkin, Glaucous-winged Gull, and Heermann’s Gull. As this paper was going to press, a Short-tailed Shearwater, a species not yet guessed (and now never to be guessed) in any of the iterations of the Next 10, was seen from Derby Hill, Oswego County. Almost concurrent with that, a Black-chinned Hummingbird on Randall’s Island in New York County furnished a first record for New York State for one of the most widely anticipated new additions for decades.



Birders at Prospect Park, *Kings*, 1 April 2021. Photo © S. S. Mitra.

Previously Unpublished Photos of First Records for New York State, 2015-2022

See article, pp. 90-113.



Left: Bronzed Cowbird, Norfolk, *St. Lawrence*, 21 Oct 2015, © Nora Lee.

Right: “Pacific-slope” Western Flycatcher, Central Park, *New York*, 22 Nov 2015, © Nadir Souirgi.



Left: Garganey, Montezuma NWR, *Seneca*, 5 Jun 2016, © Jay McGowan.

Right: Clark's Grebe, Oswego Harbor, *Oswego*, 27 Feb 2017, © Tom Johnson.



Inca Dove, Lakewood, *Chautauqua*, 8 Dec 2017, © Willie D'Anna.



Left: Common Greenshank, Timber Point CP, *Suffolk*, 5 May 2019, © Josh Cantor.
 Right: Tropical Kingbird, Dobbs Ferry, *Westchester*, 28 Oct 2020, © Tom Warren.



Left: Ferruginous Hawk, near Pine Island, *Orange*, 25 Feb 2021, © Linda Scrima.
 Right: Tundra Bean-Goose. First found in *Saratoga* in March of 2021, what was possibly the same bird was seen the following spring in Central New York, here at Seneca Lake SP, *Seneca*, 10 Mar 2022, © Jay McGowan.



Gray-breasted Martin, Prospect Park, *Kings*, 1 Apr 2021, © Shane Blodgett.



Violet-green Swallow, Vischer Ferry Nature and Historic Preserve, *Saratoga*, 22 Apr 2021, © John Hershey.



Snowy Plover, Sandy Pond Outlet, *Oswego*, 16 Sep 2021, © Jeff Bolsinger.



Zone-tailed Hawk, Green-Wood Cemetery, *Kings*, 2 Apr 2022, © Seth Barr.



Mottled Duck. First discovered by Ernst Mutchnick at Ketcham's Creek, *Suffolk*, on 5 Apr 2022; what is believed to be the same individual was re-discovered nearby the following spring, by the original finder. Here: Avon Lake, *Suffolk*, 8 Apr 2023, © Ernst Mutchnick.