RESEARCH ARTICLE · PRACTICE-BASED RESEARCH

Where should I build my nest if not with you?

Asking with birds: environmental data, the poetics of the question, and a Persian imagination in an ecological installation

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ABSTRACT

This article reflects on *Where should I build my nest if not with you?*, a collaborative immersive installation presented at the Mason Gross Galleries, Rutgers University, in the autumn of 2026. The work translated ecological data on seven threatened and endangered New Jersey birds into sculpture, sound, light, and projection, arranged as a walkable horseshoe of shore, marsh, grassland, and forest. Writing as one of the project's two leads, as the author of its narrative framework, and as the designer of its spatial plan and of one of its sculptural elements, I examine a single methodological proposition: that environmental data become sensible to a general public when they are reframed as questions rather than statements. The framework borrows from Farid ud-Din Attar's twelfth-century Persian poem *The Conference of the Birds*, in which birds undertake a journey of questioning. Through accounts of the birds' questions, the spatial composition, and a branch of ninety-nine paper feathers that encodes the competition between the red-headed woodpecker and the European starling, I argue that interrogative form can carry scientific evidence into embodied experience without reducing it to illustration, while also confronting the ethical risk of speaking for other species.

KEYWORDS

Data sonification; ecological installation; endangered birds; *The Conference of the Birds*; practice-based research; multispecies storytelling

1 Introduction: a question asked by a bird

A piping plover asks the rising water, *Why do you take my nest? What have I taken from you?* The sentence is short, and it is not a fact. Yet behind it stands a dataset: in 2025 only seventy-six pairs of piping plovers nested on the New Jersey coast, the lowest number recorded since intensive monitoring began in 1987, and flooding destroyed eighteen nests that season (Heiser and Davis 2025). The question does not replace the number. It gives the number somewhere to live.

This article examines that relation between a question and the evidence behind it, through *Where should I build my nest if not with you?*, an immersive installation I developed with six colleagues at Rutgers University in 2026. The project brought together the Rutgers Climate and Energy Institute, the Rutgers School of Engineering, and the Departments of Music and Art & Design at the Mason Gross School of the Arts, with the shared aim of finding forms of environmental storytelling through the visualisation and sonification of ecological data (Davis et al. 2026). It was exhibited in the Co-Cureate 2026 exhibition at the Mason Gross Galleries from 24 September to 10 October 2026.

I write as one of the project's two leads, alongside India Davis, and as a member of its art and design team. Three contributions were mine in particular: the narrative framework of questions, and the questions themselves; the horseshoe plan that organised the gallery into four habitats; and a sculptural branch of ninety-nine paper feathers, discussed in Section 7. I also gathered the data and sources for the black rail. The installation as a whole was a collective work, and I name my colleagues' contributions wherever they shape the argument. My aim is not to describe the exhibition in full but to test one proposition that guided my part of it: that a public with no training in ecology can meet scientific data more openly when the data arrive as a question addressed to the world, rather than as a claim about it.



Figure 1. *Where should I build my nest if not with you?*, installation view, Co-Cureate 2026, Mason Gross Galleries, Rutgers University. A timber boardwalk crosses a bed of sand toward suspended translucent fabric, while a long exposure records visitors as shadows against the projected shoreline. Photograph: Alex Staten.

2 Context: ecological art and the limits of the chart

New Jersey is home to hundreds of bird species. Nineteen are listed as endangered in the state, fifteen as threatened, and sixty-one as species of special concern, most of them pressed by loss or alteration of habitat, disturbance, competition, and contamination (NJDEP 2026). Knowledge of these pressures exists in abundance; it is held in survey reports, monitoring datasets, and geographic information systems maintained by state agencies and conservation organisations. What is scarce is not information but a way in. Many people care about their surroundings, yet few have the training to read a decade of nest counts or a century of tide-gauge records as an account of a place they know.

Contemporary art has approached this gap from several directions. Rob Nixon's account of 'slow violence', damage that is 'incremental and accretive' and therefore difficult to represent (Nixon 2011, 2), names the problem that environmental decline rarely arrives as an event. T. J. Demos has argued that ecological art must address the political and economic structures behind environmental change rather than offering nature as a consoling image (Demos 2016). In parallel, the field of auditory display has developed sonification, the systematic mapping of data to sound, as a means of perceiving pattern and change over time (Hermann, Hunt, and Neuhoff 2011). And Catherine D'Ignazio and Lauren F. Klein have shown that the apparent neutrality of the chart conceals choices about whose perspective a dataset speaks from, proposing that emotion and embodiment are legitimate channels of knowledge rather than distortions of it (D'Ignazio and Klein 2020).

These positions frame the project's central difficulty. A chart addresses a viewer who stands outside the system it describes. An installation can place the viewer inside a system, but risks turning data into atmosphere. Between the detachment of the chart and the vagueness of mood, I looked for a form that would keep the evidence precise while changing the viewer's position in relation to it. I found that form not in contemporary theory but in a Persian poem I have known since childhood.

3 A Persian frame: Attar's birds and the practice of asking

In *The Conference of the Birds* (*Mantiq al-Tayr*), composed by Farid ud-Din Attar in the twelfth century, the birds of the world gather to seek the Simorgh, a mythic bird they wish to take as their sovereign. Guided by the hoopoe, they set out on a long and dangerous journey. Many turn back with excuses; the poem is structured as a sequence of their objections and the hoopoe's answers. At the end, only thirty birds arrive, and they discover that the Simorgh they sought is themselves: in Persian, *si morgh* means 'thirty birds' (Attar 1984).

Two features of the poem shaped the installation. The first is that it is built from questions. The birds do not receive doctrine; they voice doubts, and the journey proceeds through dialogue. The second is that its conclusion is collective and reflexive: the object of the search turns out to be the community of seekers. Both features suggested a way of handling environmental data. If

each of our seven birds could address questions to the elements of its world, such as the sand, the tide, the farmer, or the survey that counts it, then the data could return as answers. And if the questions were addressed in part to people, the visitor would discover, like Attar's birds, that the subject of the inquiry includes themselves.

I am aware that this borrowing carries a cultural and ethical charge. Attar's birds are allegorical figures for the soul, not ecological organisms, and to give real species a voice is to risk what Vinciane Despret calls the temptation of speaking *for* animals rather than attending to how they live (Despret 2022). The framework addresses this risk in two ways, which I return to in Section 9: the questions never claim to report what a bird thinks, and every question is tied to a documented condition of the species' life.

4 Method: a collaborative, practice-based inquiry

The project followed a practice-based model in which making is itself a mode of inquiry and knowledge emerges through the decisions of the work (Sullivan 2010). Seven Mason Gross students formed the team. India Davis and I shared leadership. The art and design team comprised India Davis, Jay Huetz, Pilar Uhl, Jessica Yu, and me. Leif Haley and Stephanie Leotsakos composed the sound, and Stephanie Leotsakos also produced additional art and localised sound. Pilar Uhl drew the illustrations and designed the zine that visitors took home. Leif Haley wrote the project's overview and research report (Davis et al. 2026). Atif Akin supervised the project as faculty advisor, and Oliver Stringham provided data consulting.

The working process moved in three stages. First, each bird was researched through published conservation literature and public datasets, including state beach-nesting bird surveys, tide-gauge records, land use and land cover data, and the North American Breeding Bird Survey; the analysis was carried out in Excel and QGIS (Davis et al. 2026). Second, I wrote a set of questions for each bird, addressed to the elements implicated in its decline, so that the research findings could be read as replies. Third, the questions and the data were given spatial, visual, and sonic form. The sound designers composed seven three-minute 'sound stories', one for each bird, which played in sequence and looped every twenty-one minutes, while localised speakers hidden in the landscape carried bird calls, crickets, reeds, waves, and passing aircraft (Haley and Leotsakos 2026).

The charts reproduced in this article were redrawn by me for publication from the project's analysis. They are included not as the work itself but as the evidence on which the work's questions rest.

5 The room: a horseshoe of habitats

My spatial plan arranged the gallery as a horseshoe of four interconnected habitats. Entering, the visitor met the shore on the left and moved clockwise through marsh and grassland to forest. Within this sequence, the seven birds were placed according to where they live: the piping plover,

black skimmer, and red knot at the shore; the black rail in the marsh; the bobolink and upland sandpiper in the grassland; and the red-headed woodpecker in the forest. The order of the sound stories followed the same path, so that what visitors heard corresponded to where they stood.

The horseshoe was chosen for three reasons. It produced a continuous route without a single privileged viewpoint, so that the work could only be understood by moving through it. It left an open centre, furnished with a bench, from which the whole landscape could be seen at once, offering a pause between immersion and overview. And it described habitat not as a set of separate rooms but as a gradient: sand passes into wet ground, wet ground into grass, grass into woodland. This reflected a conviction that ran through the project, that habitat is ‘an ongoing ecological process’ shaped by sediment, tide, season, growth, fire, and decay, rather than a static place (Davis et al. 2026). When the processes are interrupted, the place begins to fail.

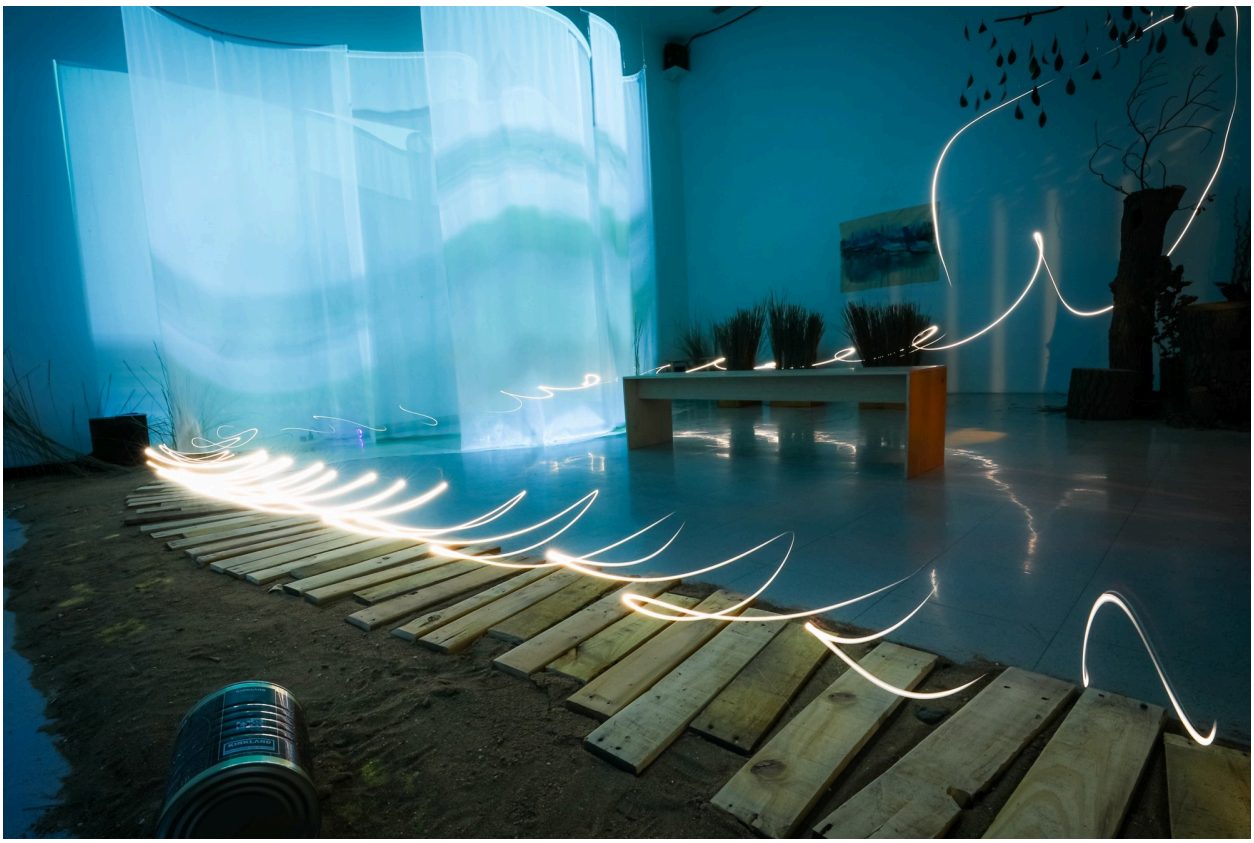


Figure 2. The horseshoe plan seen from the shore. Sand and a timber boardwalk lead past suspended, projected fabric toward the grassland planters and the forest of tree stumps; the bench at the centre offers a view across all four habitats. A light trail drawn during a long exposure traces the visitor’s route. Photograph: Alex Staten.

6 The birds and their questions

Each set of questions was written after the research for that bird, and each question was meant to be answerable by evidence. The examples below follow the horseshoe from shore to forest.

6.1 The shore: *piping plover, black skimmer, and red knot*

The piping plover nests on open sand, protected only by sparse vegetation, where people, pets, beach raking, and rising water all reach it. Shoreline hardening through jetties and seawalls further reduces the area in which it can nest (Conserve Wildlife Foundation 2024c). Its questions are addressed to the sand, the rising water, and its own nests:

> *To the sand:* 'Why are you covered in footsteps and trash, where before you were serene and uninterrupted?'
> *To their nests:* 'How can I make you so that you will protect me and my young in this unfamiliar world?'

The answer is in the nest counts (Figure 3). Productivity in 2025 rose to 0.84 fledglings per pair, but this remains well below both the 1.245 fledglings per pair needed to maintain the population and the federal recovery target of 1.50; more than half of the state's plovers nested within a single refuge, the Edwin B. Forsythe National Wildlife Refuge (Heiser and Davis 2025). In the gallery, Stephanie Leotsakos mapped the annual pair counts to the intervals between plover calls, so that the bird became audibly sparser as its numbers fell, before footsteps and then rising water overtook the soundscape.

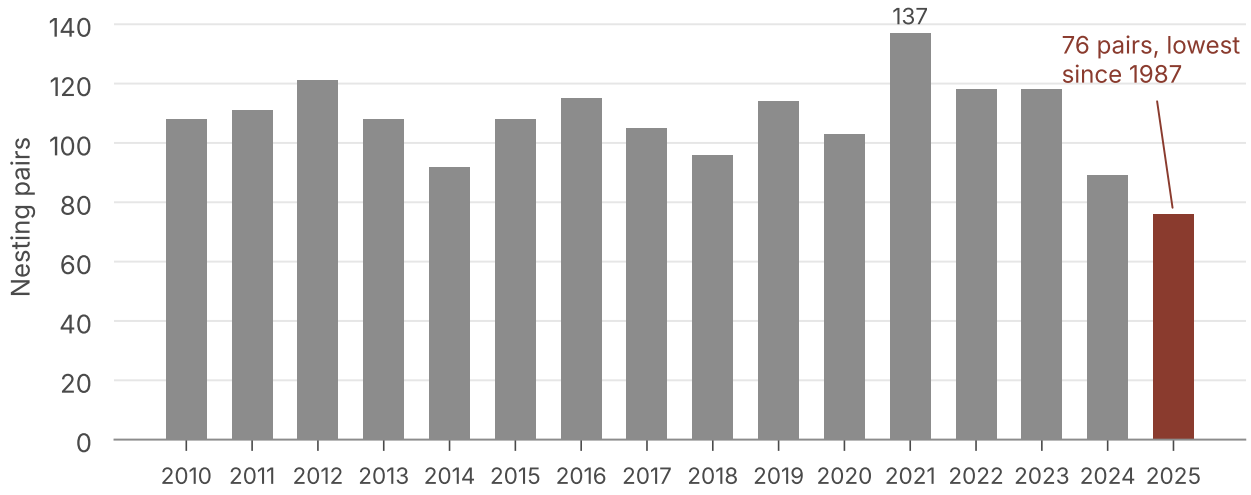


Figure 3. Piping plover nesting pairs in New Jersey, 2010 to 2025. The 2025 count of seventy-six pairs is the lowest since 1987. Redrawn by the author from the project's analysis (Davis et al. 2026); data from Heiser and Davis (2025).

The black skimmer also nests directly on the beach, scraping a shallow depression into the sand, and so has nowhere to hide from people, pets, tides, or oil contamination (Conserve Wildlife Foundation 2024a). Its question to the sand gave the installation its title: *Where should I lay my eggs if not with you?* Its question to the tide is darker: *How many nests have you carried away?* The data on its sixteen New Jersey nesting sites, which together represent the entire known state population (NJDEP 2025a), show colonies abandoning some sites while new ground such as

Horseshoe Island emerges, and show how much smaller the count of fledged chicks is than the count of adults (Figure 4). Leif Haley gave each site its own pitch and sounded adults and chicks as alternating chords, the second always quieter and thinner than the first.

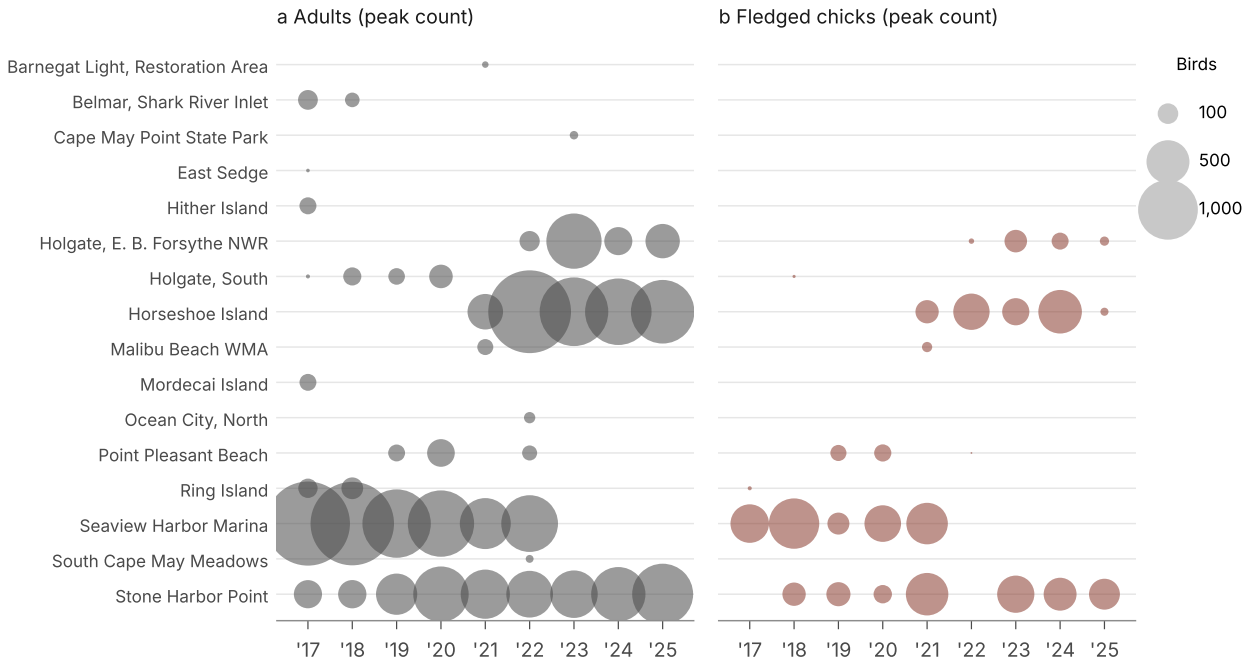


Figure 4. Black skimmer peak counts at sixteen New Jersey nesting sites, 2017 to 2025: (a) adults; (b) fledged chicks. Circle area is proportional to the number of birds and uses the same scale in both panels. Redrawn by the author from the project's analysis (Davis et al. 2026); data from NJDEP (2025a).

The red knot's questions concern hunger and time. Flying more than nine thousand miles twice a year, red knots stop in Delaware Bay to feed on horseshoe crab eggs; birds that cannot reach about 180 grams are too light to complete the journey to their Arctic breeding grounds (NJDEP 2025b). The bird asks the bay, *Where did all of the crabs go?*, and asks the snow, *Every year you melt earlier, too quickly for me to keep up.* The data reveal a subtler answer than the first question expects (Figure 5). After a moratorium on harvesting horseshoe crabs, egg density has partially recovered, yet the red knot population has not, and in many years only a small share of the birds reached the weight they needed. Climate change shifts the timing of crab spawning and warms the Arctic breeding grounds, and the red knot became the first endangered bird for which climate change was cited as a primary threat (NJDEP 2025b; McNamara 2016). The question about the crabs is answered, in part, by the question about the snow.

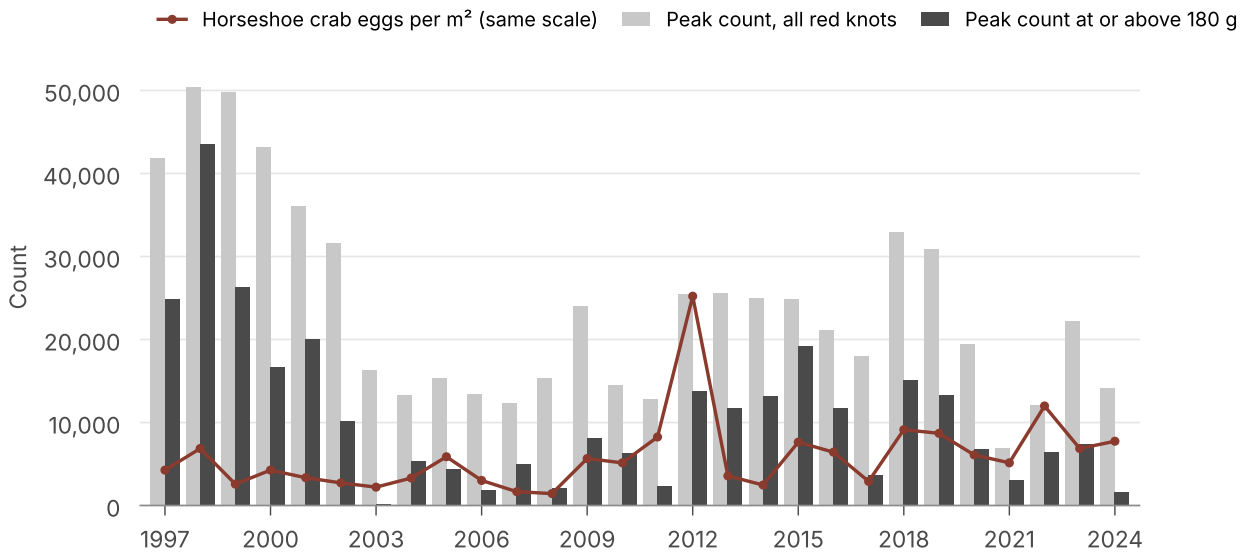


Figure 5. Red knots in New Jersey, 1997 to 2024: peak count of all birds, peak count of birds at or above 180 g, and average horseshoe crab egg density (eggs per m², plotted on the same scale). Redrawn by the author from the project's analysis (Davis et al. 2026); data from NJDEP (2025b).

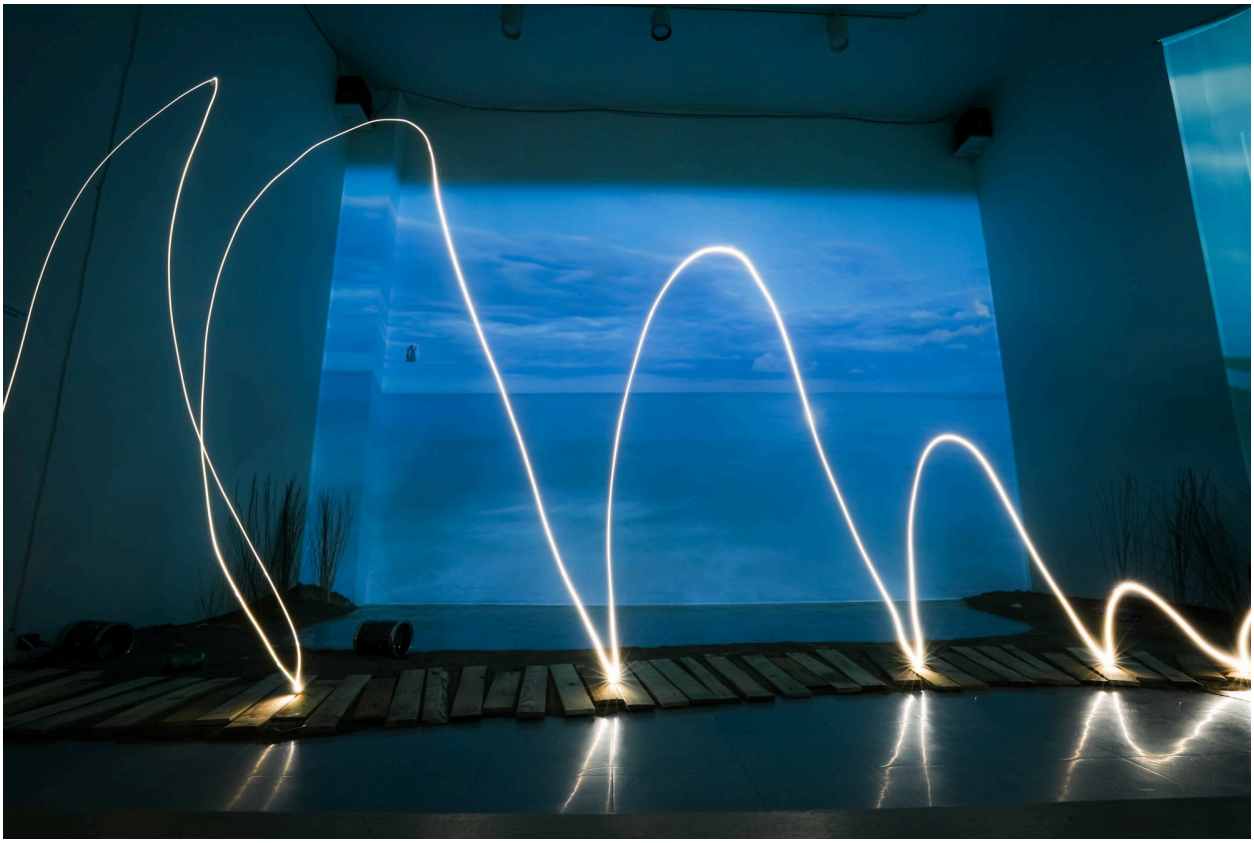


Figure 6. The shore. A projected seascape fills the gallery wall behind sand, beach grass, discarded cans, and a timber boardwalk; arcs of light recorded in a long exposure rise and fall along the walkway. Photograph: Alex Staten.

6.2 *The marsh: black rail*

The black rail was the bird I researched most closely. It is small and rarely seen, known mostly by its *kic-kic-kerr* call from coastal salt and brackish marshes. Once common enough to be hunted as game, it has declined since the early twentieth century as marshes were filled, ditched, and polluted; between 1953 and 1973 nearly a quarter of New Jersey's tidal marshes were filled or diked (NJDEP n.d.). Across the Atlantic Coast, black rail numbers have fallen by more than ninety percent since the 1990s. Only forty to sixty pairs are thought to remain in New Jersey and between 355 and 815 pairs along the entire Atlantic Coast, close to the threshold of about three hundred pairs below which a loss of genetic diversity would make extinction very likely (Reynolds 2018; Watts 2016).

The bird's nests sit only slightly above the marsh surface, so the decisive variable is water. The tide gauge at Atlantic City records more than a century of monthly mean sea level, and its trend is unmistakable: a rise of about 4.25 millimetres per year, close to half a metre since 1911 (Figure 7; CO-OPS n.d.). New Jersey is also among the fastest-warming states in the country (Climate Central 2026). I wrote the black rail's questions to hold both the physical and the human pressures together:

> *To the water*: 'Why do you keep rising? You used to know where to stop.'
> *To the building:* 'You took the marsh where my grandmother nested. Do you remember her?'
> *To the spider*: 'How do you hold your world together when the ground keeps shifting?'

The question to the building refers to the historical filling of marshes; the question to the water refers to the tide-gauge record; and the question to the spider, a creature that rebuilds its structure constantly, asks about resilience in a world without stable ground. In the sound story, Leif Haley mapped the sea-level record to pitch, so that the monthly values, which begin close to a unison drone, drift audibly away from it over the decades, while granular synthesis fragments the black rail's call together with the sounds of construction.

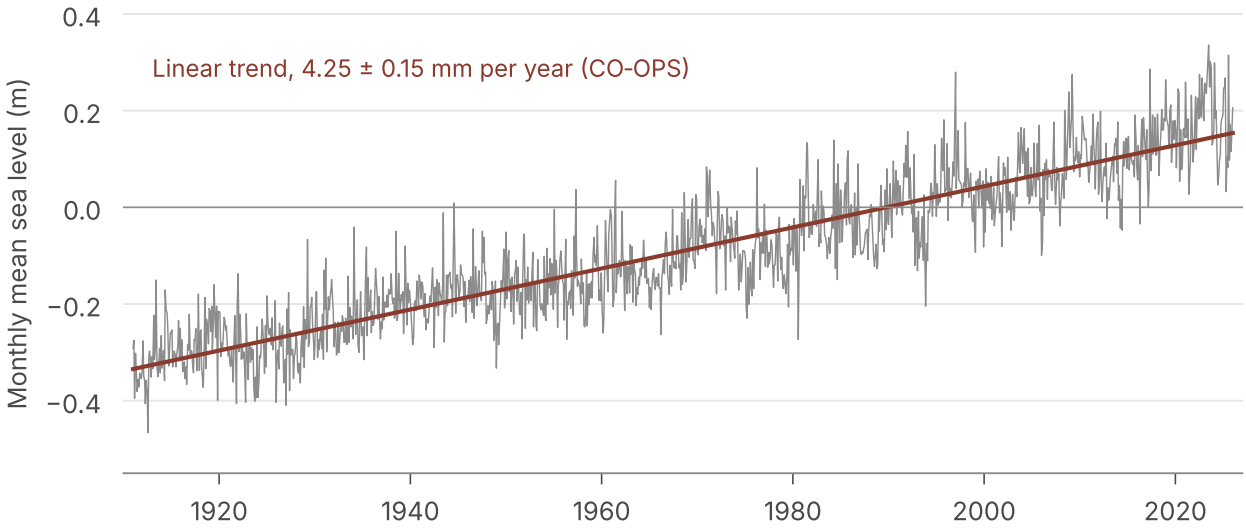


Figure 7. Monthly mean sea level at Atlantic City, New Jersey, 1911 to 2026, relative to the most recent mean sea level datum. The red line is a least-squares fit; the published relative trend is 4.25 ± 0.15 mm per year. Redrawn by the author from the project's analysis (Davis et al. 2026); data from CO-OPS (n.d.).



Figure 8. Between columns of suspended fabric, a spiral of light rises above a reflective floor and a tuft of marsh grass, with the projected horizon beyond. Photograph: Alex Staten.

6.3 *The grassland: bobolink and upland sandpiper*

The grassland birds turned the project's attention from water to land use. The bobolink nests in hayfields and pastures, where mid-season mowing accounts for more than half of nest losses in New Jersey; a higher cutting height and mowing delayed until mid to late July would save many nests (Shaffer et al. 2023). The upland sandpiper requires grasslands of one hundred contiguous acres or more, and in their absence it is found on farms, landfills, solar farms, and airports, whose maintained grasslands have become some of its last refuges (Conserve Wildlife Foundation 2024e; NJ Audubon n.d.). Accordingly, the sandpiper's questions are addressed to the grass, the farmer, the suburb, and the airplane:

> *To the grass:* 'When the expanse is split apart, whose identity remains?'
> *To the airplane:* 'What pain makes you roar at every hour? What confusion leads you and I to collide?'

Between 1986 and 2020, urban land in New Jersey grew by more than 377,000 acres while agricultural land fell from fourteen to nine percent of the state, and forest and wetland also declined (Figure 9; Lathrop and Douthat 2026). In the gallery, five planters of grass were labelled with these land-cover classes (Figure 10). Stephanie Leotsakos translated the same land-cover record into a sequence of chords whose pitches rise and fall with the acreage of each class, so that the changing landscape could be heard as harmony.

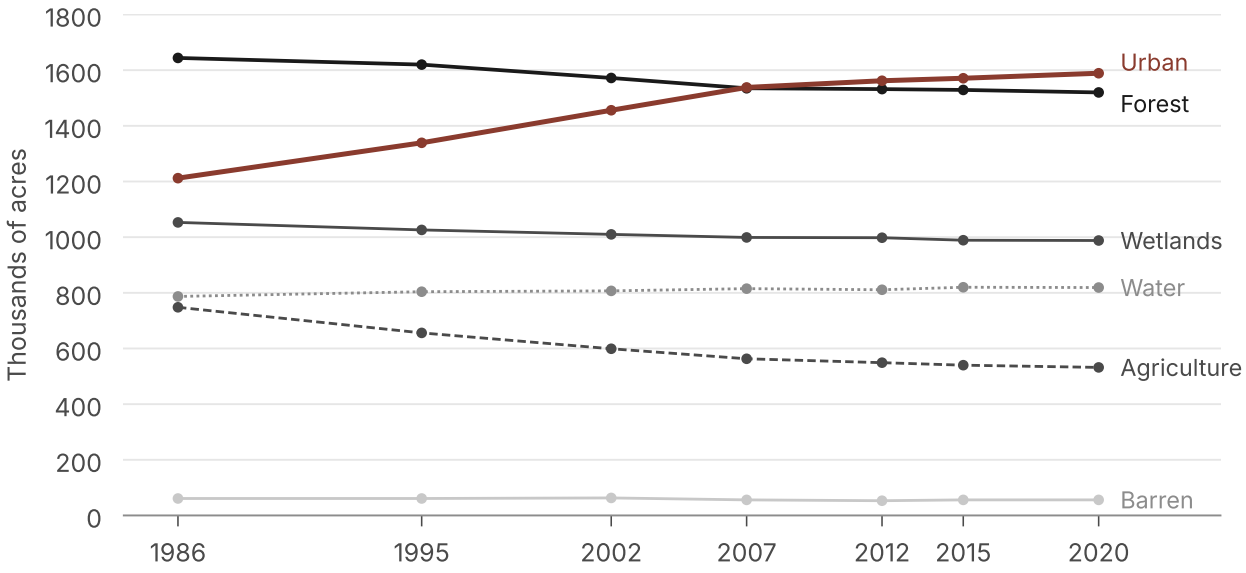


Figure 9. Land cover in New Jersey by class, 1986 to 2020, in thousands of acres. Redrawn by the author from the project's analysis (Davis et al. 2026); data from Lathrop and Douthat (2026).



Figure 10. The grassland. Planters of tall grass are labelled with land-cover classes (Urban, Forest, and Wetlands in front; Agriculture and Water behind), so that the landscape is read as a set of competing uses. Photograph: Alex Staten.

The project's geographic analysis made the sandpiper's predicament concrete. In 2015 New Jersey held 476,392 acres of grassland divided among 31,611 patches, with a median patch of only three acres. Patches of one hundred contiguous acres or more totalled 243,771 acres in 765 patches (Figure 11; NJDEP Bureau of GIS 2023; Davis et al. 2026). This is the theoretical maximum of sandpiper habitat by extent alone; observation records show the bird in fewer, scattered places, often near airports (GBIF.org 2026). Leif Haley sonified each of the 765 qualifying patches as an overtone above a fundamental of one hundred acres, from north to south, so that the size of the remaining fields was heard as a harmonic series.



Figure 11. Grassland in New Jersey, 2015: (left) all grassland, defined as land-cover codes 2100 (cropland and pastureland) and 4410 (old field with less than 25% brush cover); (right) only patches of one hundred contiguous acres or more, the minimum extent required by the upland sandpiper. GIS analysis by the project team (Davis et al. 2026); data from NJDEP Bureau of GIS (2023).

6.4 *The forest: red-headed woodpecker*

The red-headed woodpecker nests in open woodland with standing dead trees, called snags, and hunts insects in flight in the open air between them. Its habitat has narrowed as dead trees are removed, wildfires are suppressed, and forests grow denser, and it must also compete for nesting cavities with the European starling, a species introduced to North America in the nineteenth century and now numbering about ninety-three million birds on the continent (Conserve Wildlife Foundation 2024d; Cornell Lab of Ornithology n.d.-a; n.d.-b). The woodpecker's questions are addressed to a homeowner, a dead tree, and a survey:

> *To the human:* 'When you decide the old dead tree in your yard has to go, do you think about whose home you're removing?'
> *To the snag:* 'How alive do you need to look before they cut you down?'
> *To the Breeding Bird Survey:* 'How many times can you count nothing before it means something?'

The last question points directly at the data. In the North American Breeding Bird Survey for New Jersey since 1966, red-headed woodpeckers were detected in thirteen of 1,047 route-years, about one percent, whereas European starlings were detected in 1,025, about ninety-eight percent. No woodpecker was detected at all between 2006 and 2022; one was recorded in 2023, two in 2024, and three in 2025 (Figure 12; Ziolkowski et al. 2026; Hostetler et al. 2026). A zero in this record

does not mean the bird was absent, only that it was too scarce to be counted. That distinction, between absence and the failure to register presence, became the subject of my own sculptural contribution.

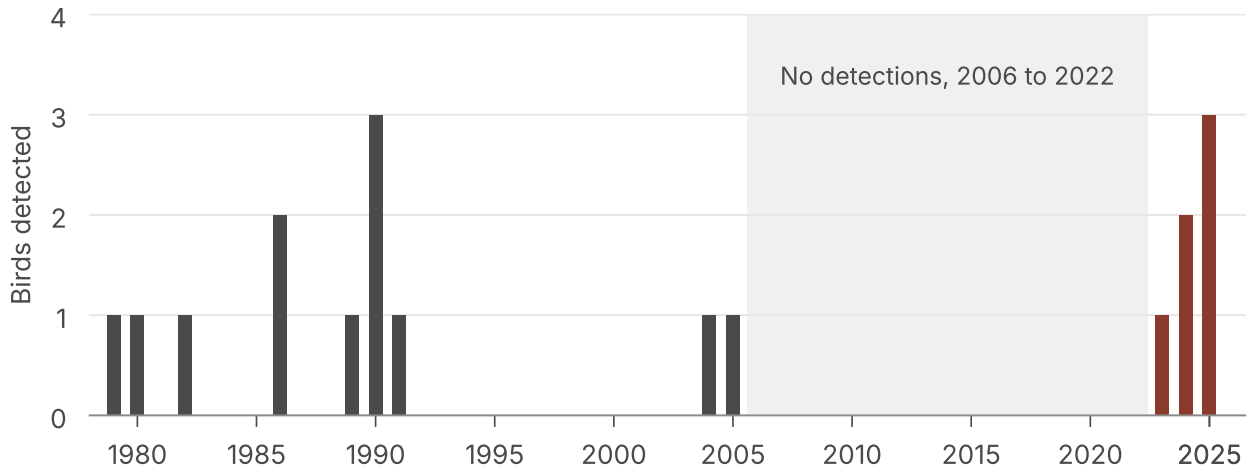
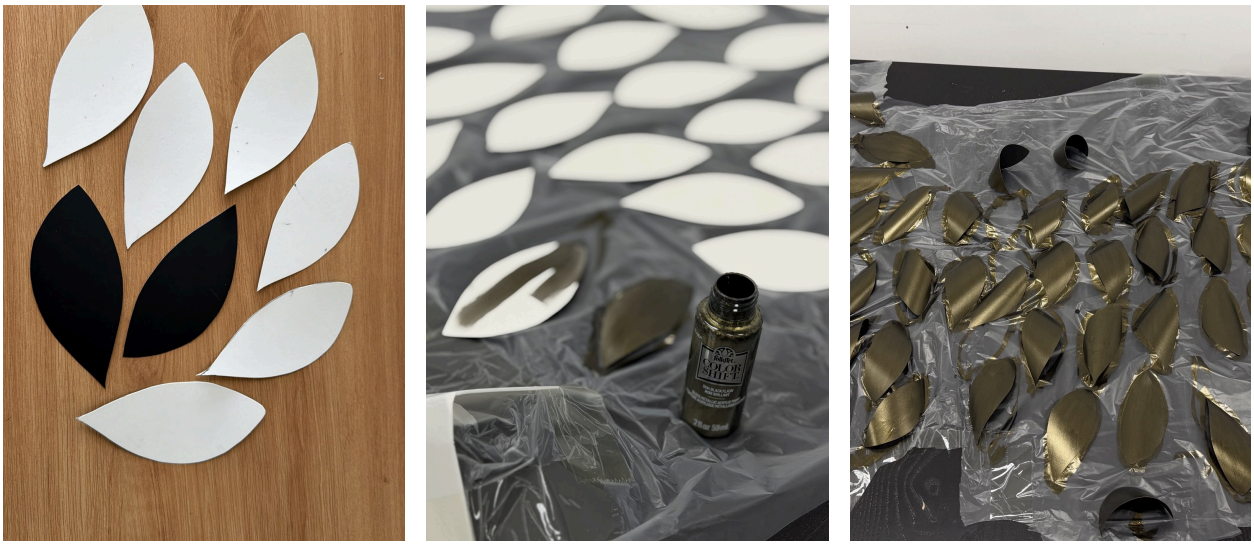


Figure 12. Red-headed woodpeckers detected per year in the North American Breeding Bird Survey in New Jersey, 1979 to 2025. A zero records an absence of detection, not necessarily an absence of birds. Redrawn by the author from the project's analysis (Davis et al. 2026); data from Ziolkowski et al. (2026) and Hostetler et al. (2026).

7 Ninety-nine feathers

Above the forest of tree stumps I hung a natural branch, and from it ninety-nine feathers on clear filament. Each feather was cut by hand from scratch paper, painted with a colour-shifting metallic acrylic, and curved by hand as it dried (Figure 13). Ninety-eight are dark; one is red. The proportion transcribes the survey record: starlings appear in roughly ninety-eight percent of New Jersey route-years and red-headed woodpeckers in roughly one percent. The red feather does not represent a single woodpecker. It represents the woodpecker's share of attention in the data that are meant to see it.



a b c

Figure 13. Making *Ninety-nine feathers*: (a) feather shapes cut by hand from scratch paper; (b) painting the paper with colour-shifting metallic acrylic; (c) painted feathers curving as they dry. Photographs: Mahsa Masoumi.



Figure 14. Mahsa Masoumi, *Ninety-nine feathers*, 2026, natural branch, scratch paper with colour-shifting metallic acrylic, and clear filament. Ninety-eight dark feathers and one red feather transcribe the proportion of New Jersey Breeding Bird Survey route-years in which European starlings and red-headed woodpeckers were detected. A line of light drawn in a long exposure follows the branch. Photograph: Alex Staten.

I chose feathers rather than birds because a feather is what remains when a bird has gone, and what a person may find on the ground without ever having seen the bird. Paper was chosen for its fragility and its ordinariness: scratch paper is material that has already been used and set aside. The colour-shifting paint gave the dark feathers a changing surface under the gallery's shifting light, so that the mass of starlings flickered and moved, while the red feather held still in colour. Suspended from filament, all the feathers turned slightly in the air currents of visitors passing, and their shadows fell across the wall as a second, larger flock.



Figure 15. Installing *Ninety-nine feathers*: each feather is suspended from the natural branch on clear filament, at varied heights, from a rolling scaffold in the gallery. Photograph: Mahsa Masoumi.

The piece was designed to be read in two stages. From a distance it appears as a tree in leaf, or a tree in a storm of falling leaves. Only on approach does the visitor notice that the leaves are feathers, and then, among them, the single red one. This delay matters. It repeats, at the scale of the body, the experience of the survey itself, in which a rare species is present but almost unseen. The question I attached to the branch was the woodpecker's question to the starling: *When you take the home I carved to make a place for yourself, where am I supposed to lay my young?*



Figure 16. *Ninety-nine feathers* (detail). The single red feather hangs among dark paper feathers whose metallic surface catches the warm light of the forest habitat. Photograph: Alex Staten.

The same proportion appeared independently in Stephanie Leotsakos's sound story for the woodpecker, in which ninety-eight starling voices accumulate in rhythm while the woodpecker's drumming disappears, returning as one sound, then two, then three, as in the survey's last three years (Davis et al. 2026). The convergence was not planned as an illustration of one medium by another. It arose because both of us returned to the same figure in the data, and it gave the forest habitat a rare coherence between what was seen and what was heard.



Figure 17. The forest habitat, with tree stumps, young trees, the feather branch, and a painting of an airport at the water's edge. Visitors appear only as shadows on the wall; in this monochrome rendering only the red feather keeps its colour. Photograph: Alex Staten.

8 Reception: what visitors carried away

Visitors received a zine designed by Pilar Uhl that told each bird's story, and an album of the seven sound stories, with notes on the sonification methods, was published online (Haley and Leotsakos 2026). Beside the zine, we left feedback slips with a single prompt: *How did this exhibit change your understanding of NJ birds*? The back of the zine closed with a question of our own, addressed to every visitor: *If this were the last time you could hear these birds, would you listen differently*?

The responses were informal and should not be read as a systematic evaluation, but they show how the interrogative form was received. Several visitors answered by asking questions in turn or by recalling their own losses. One wrote of no longer hearing mourning doves, frogs, or crickets, sounds familiar from childhood, and of no longer seeing fireflies or bats. Another described the work as 'a dramatic portrait in all senses of the impact humans have had on these bird populations'. A third wrote simply, 'I never realized how much emotion could be shown through a bird's call.' An attendee interviewed by the campus radio station contrasted the installation with ecological art that presents 'still images that just show photo-realistic animals', observing that this work 'immerses the viewer in the habitat' (WRSU 2026).

What these responses share is a change of position. Visitors did not report learning a statistic; they reported recognising themselves within the system the data describe, as listeners who had noticed a silence, or as neighbours of birds they had not known were endangered. This is, in a small way, the reflexive turn of Attar's poem, in which the seekers find that what they sought is themselves.



Figure 18. Visitors pass the projected shoreline, recorded by a long exposure as translucent figures that seem to share the light of the sea. Photograph: Alex Staten.

9 Discussion: the ethics and limits of asking

The interrogative framework has clear limits. The first is the problem of voice. To write a bird's question is to imagine an interiority that cannot be verified, and multispecies scholarship has warned against anthropomorphic projection as much as against indifference (Kirksey and Helmreich 2010; van Dooren 2014). I tried to discipline the imagination in two ways. The questions are written as questions, which claim nothing about what a bird knows; they open a space for the evidence rather than closing it with a statement. And each question is anchored to a documented condition: the rising water at the Atlantic City gauge, the mowing calendar on a hayfield, the zeros in a survey. The bird's voice is therefore a device of address, a way of turning the visitor

toward a body of data, not a report of animal experience. Thom van Dooren describes extinction as the unravelling of 'entangled' relationships across generations (van Dooren 2014); the questions attempt to make those relationships visible by naming their parts.

The second limit concerns accuracy. Translating data into sound, light, and form necessarily simplifies them. The sound designers mapped values deliberately and documented their mappings publicly, and the charts in this article restore some of the precision that a gallery cannot hold. Yet a visitor who walks through the installation will not leave with the numbers. The claim of the work is more modest: that encountering the shape of a decline, sparser calls, a falling pitch, a single red feather among ninety-eight dark ones, can make a person willing to look for the numbers, and better able to understand them when found.

The third limit is cultural. The Persian frame is not neutral; it brings a mystical poem into a scientific and American context, and it is legible in different ways to different audiences. For visitors unfamiliar with Attar, the frame operated through structure rather than reference: the dialogue of questions, the journey through habitats, the turn toward the self. For me, as an Iranian designer working in the United States, it offered a way of bringing a tradition of moral storytelling into contact with environmental science, and of suggesting that the question of where to build a nest is shared across species and across migrations.

10 Conclusion

Where should I build my nest if not with you? proposed that environmental data might reach a general public not as a set of claims but as a set of questions. Borrowing the structure of Attar's *The Conference of the Birds*, the installation gave seven threatened and endangered New Jersey birds questions addressed to the sand, the tide, the crabs, the farmer, the airplane, the survey, and the visitor, and allowed the research to answer through sculpture, sound, light, and space. My own contributions, the narrative framework and its questions, the horseshoe plan, and the branch of ninety-nine feathers, were attempts to keep the evidence exact while changing where the viewer stands in relation to it.

The question in the title remains open, because it is not finally addressed to a bird. It is addressed to the people with whom these birds share a shore, a marsh, a field, and a forest. In Attar's poem the birds learn that the sovereign they sought is their own gathered company. The installation's hope, and the argument of this essay, is that ecological knowledge can work in a similar way: that when people are invited to ask alongside other species, they may recognise that the home in question is also their own.

Acknowledgements

Where should I build my nest if not with you? was created by India Davis, Leif Haley, Jay Huetz, Stephanie Leotsakos, Mahsa Masoumi, Pilar Uhl, and Jessica Yu. Leadership: India Davis and Mahsa Masoumi. Art and design: India Davis, Jay Huetz, Mahsa Masoumi, Pilar Uhl, and Jessica Yu. Sound composition: Leif Haley and Stephanie Leotsakos. Additional art and localised sound: Stephanie Leotsakos. Illustration and zine: Pilar Uhl.

Project report: Leif Haley. Faculty supervisor: Atif Akin. Data consulting: Oliver Stringham. All installation photographs are by Alex Staten and are reproduced with permission; process photographs are by the author. Bird call recordings were drawn from the Cornell Lab of Ornithology's Macaulay Library and from xeno-canto. I thank Stephanie Cronenberg, Oliver Stringham, Scott Ordway, Jackie Thaw, and Atif Akin for their support, and the Mason Gross Galleries for hosting the exhibition through the Rutgers Co-Cureate 2026 programme.

Author contributions

Mahsa Masoumi co-led the project; conceived the narrative framework based on *The Conference of the Birds* and wrote the birds' questions; designed the horseshoe habitat plan; designed and fabricated *Ninety-nine feathers* and photographed its making; gathered data and sources for the black rail; redrew the figures; and wrote this article.

Funding

The project was supported by the Rutgers Climate and Energy Institute, with funds provided by Wade K. Trappe and Sheila Borges Rajguru.

Disclosure statement

No potential conflict of interest was reported by the author.

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