

NestWatch **Digest**

NESTING SEASON 2024



Celebrating an Outstanding Year!

We're thrilled to share our annual report showcasing an exceptional year of participatory science with NestWatch. Your dedication in 2024 yielded remarkable results: 42,357 nest observations across 45 countries, a 17.5% increase from 2023. With an additional 58,542 historic records uploaded, this past year also marked the successful completion of our transcription of the North American Nest Record Card collection, a huge milestone that has been 6 years in the making (see pages 4-5). We also joined forces with American Kestrel Partnership in 2024 to ensure a long-term, stable data-entry platform and database home for their participatory science nest-monitoring program. This partnership brought on board another 6,484 American Kestrel nest records as well as hundreds of hard-working nest monitors.

The impact of your work is clear, as this report showcases our collective achievements in conservation, scientific research, and community engagement throughout 2024. We've also expanded our reach by launching a new website which includes Spanish translations (and sets us up to add more languages in the future), and welcoming new NestWatch Chapters in Colombia, Ecuador, and Chile.

Our participants remain the cornerstone of our success, and we can't wait to see what will happen in this coming nesting season.

With gratitude,



Robyn Bailey

Cover: Wilson's Plover nest by Edwin Alomia Arroyo
Right: Kentish Plover by Graziano Aretusi



This issue of the *NestWatch Digest* is brought to you by NestWatch, a research and education project of the Cornell Lab of Ornithology. The NestWatch project is made possible by the efforts and support of thousands of participants across the world. This document contains accessibility features for those with visual impairments; for assistance contact nestwatch@cornell.edu.

Anyone, anywhere, who finds a nest is welcome to join NestWatch. Help scientists monitor nesting birds while you support bird conservation in your own community. To join, visit NestWatch.org and get certified as a nest monitor. Certification is free and ensures that nest monitoring activities follow our code of conduct designed to protect birds and their nests.

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NestWatch extends a heartfelt thank you to all of our participants! Your nest data joins hundreds of thousands of observations stretching over 100 years that are critical for understanding the breeding biology of birds across the world.

Mountain Chickadee by Christine Haines



"The historic bird cards are a real treasure trove of information—a snapshot of how things were back in the day, and an acknowledgment of the observers and their contributions. I have been introduced to birds that have been observed out in the Western US, the UK, and Canada."

—Nest Quest Go! user @psychocat 1



End of an Era

Nest Quest Go! was a success!



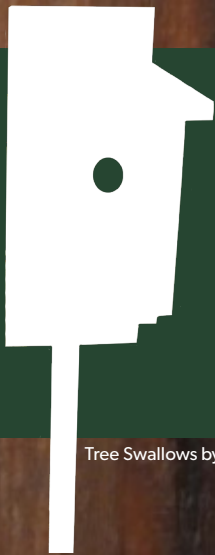
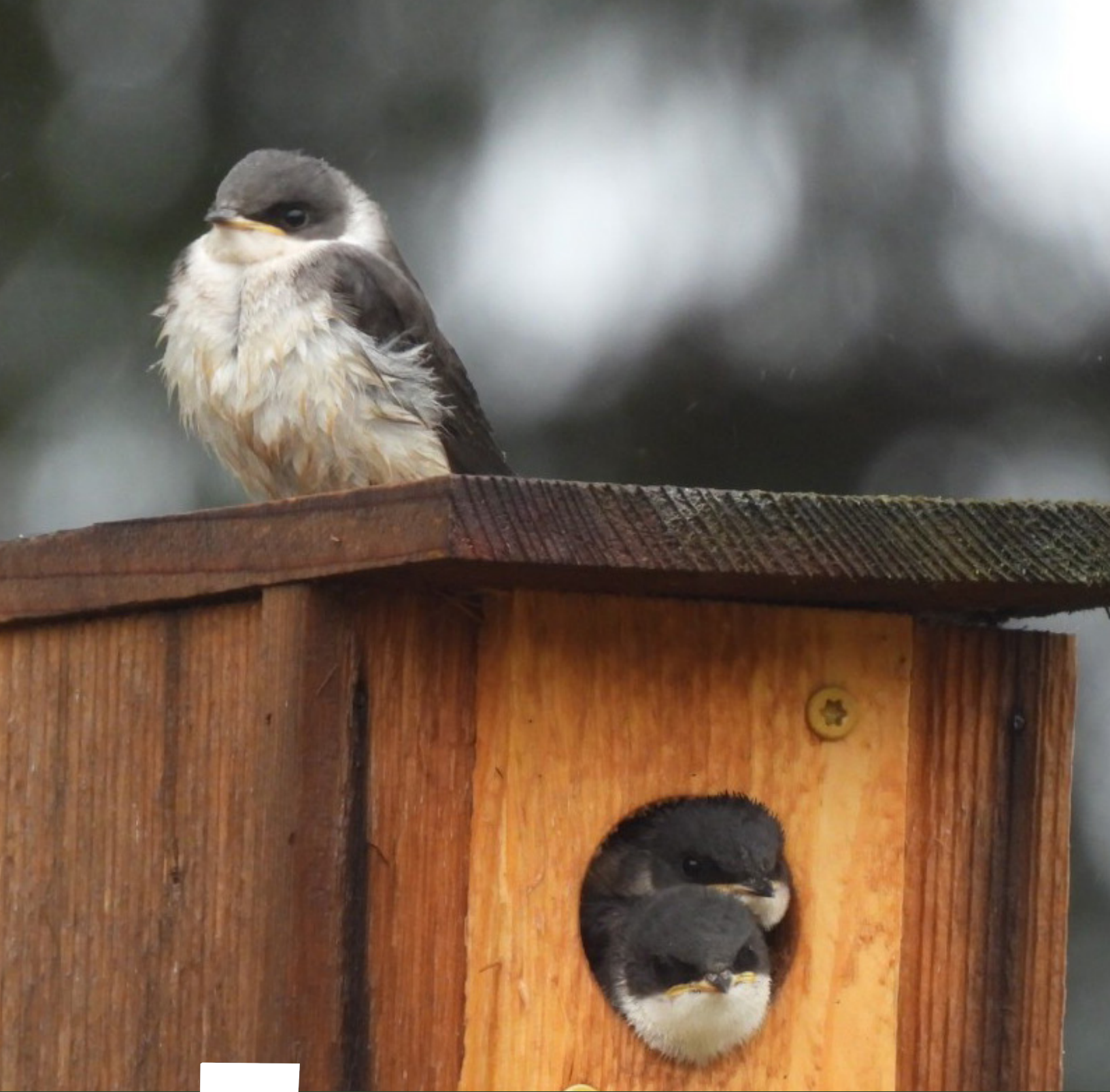
The *Nest Quest Go!* project endeavored to digitize, transcribe, and integrate hundreds of thousands of historical nest records from the North American Nest Record Card collection into the NestWatch database. *Nest Quest Go!* used the Zooniverse platform to crowd-source nest record card transcription by thousands of dedicated volunteers. We organized these cards into individual projects and often separated them into species groups.

In 2024, the *Nest Quest Go!* project completed transcription of all the valid nest record cards in our collection! Most of these 277,461 nest records are uploaded into the NestWatch database and available via our open access data download. We're working on cleaning the final few datasets to be uploaded this spring. A warm, heartfelt thank you goes out to all of our Zooniverse volunteers for their efforts these past six years!

Remarkable Records

NORTH AMERICAN NEST RECORD CARD PROGRAM										YEAR		Shaded Boxes not to be completed by observer										
Species:	Bachman's Warbler									1	9	37	5	6	4	0	9			11	14	
Observer (two initials, last name)	H M Stevenson									15	17										1	
Locality (in relation to nearest town)	Muddy Swamp Tuscaloosa									Fill in if known												
County	Tuscaloosa									Elevation (in feet above sea level)		Latitude		Longitude								
State or Province	Ala.									34	00	36	2	00	31	8	17	33				
HABITAT (circle where appropriate)																						
1. Woods <input type="radio"/> 2. Swamp <input checked="" type="radio"/> 3. Marsh 4. Field 5. Grassland 6. Desert 7. Tundra 8. Suburban 9. Urban																						
0. Other (specify)																						
01. Coniferous <input checked="" type="radio"/> 02. Deciduous 03. Mixed 04. Orchard 05. Cultivated 06. Fallow 07. No Veget. 08. Hedgerow																						
09. Shrub 10. Salt 11. Brackish 12. Fresh 13. Sandy Beach 14. Gravel Beach 15. Other (specify)																						
DOMINANT PLANT(S) IN HABITAT (list one or two)																						
Oaks Hickory																						
NEST SITE (circle where appropriate)																						
01. Bare ground 02. On ground in vegetation <input checked="" type="radio"/> 03. Floating 04. Low vegetation 05. Shrub 06. Palm 07. Deciduous tree branch																						
08. Deciduous tree cavity 09. Conifer branch 10. Conifer cavity 11. Nest box 12. Other structure 13. Cliff or bank																						
14. Other (specify)																						
PRINCIPAL PLANT OR STRUCTURE																						
SUPPORTING NEST																						
Height of Eggs Above Ground or Water in Feet (feet and tenths if under five feet)																						
															Feet	Tenths						
															7	4	9	9	7	76		
If parasitized by Cowbird check here <input type="checkbox"/> If same pair had other nestings this year, indicate which this is (1, 2, 3)																						
and see instructions. (use separate card for each nesting)																						
PLEASE COMPLETE BOTH SIDES OF THE CARD																						
																		78	79	80	1	
* See Wilson Bulletin, 1938																						

The Nest Quest Go! project unearthed several surprises. Pictured above is possibly one of the last records of a Bachman's Warbler nest, a species that is now extinct.



48,940

NEST STRUCTURE PLANS DOWNLOADED IN 2024

Find free nest box plans via our [Right Bird, Right House](#) tool.

Conservation Highlights

Holger Teichmann / Macaulay Library



NestWatch provided a \$5,000 grant to Aquasis, a non-profit organization in northeastern Brazil, engaging in impactful conservation and species reintroduction work. The project is focused on the Gray-breasted Parakeet, a highly-endangered species. Through reintroductions and an extensive nest box program, Aquasis has pulled the species back from the brink of extinction, with the wild population increasing from <100 to approximately 2,000. Two Cornell students will be joining the team to continue reintroduction efforts this summer.

On Vancouver Island in Canada, a group of NestWatchers has been faithfully working to restore the Western Bluebird population. By the mid-1990s, populations on the island had vanished and they were not seen for the next 20 years. Fortunately, the Cowichan Valley Naturalists—in partnership with the British Columbia Conservation Foundation—were permitted to start a reintroduction program, bringing in birds from Washington state. Thanks to the efforts of landowners, citizen scientists, and donors, 61 Western Bluebird chicks fledged through their program in 2024. We love this example of a community rallying to bring back a vanishing species to their island home, while also documenting their success with NestWatch. [Learn more about the project.](#)

In 2024, NestWatch collaborated with Tandem Global (previously known as the Wildlife Habitat Council), an international non-governmental organization working to enable conservation certifications for corporate sites. We presented a webinar and a 90-minute in-person workshop, both focused on improving habitat for nesting birds and monitoring for success at corporate locations. These trainings reached ~500 industry and nonprofit leaders who are interested in supporting biodiversity on private lands managed by businesses. The free webinar is [archived online](#).

Osprey by Paul Messing, General Motors, Warren Technical Center (MI).



Regional Roundup

Highlights from the 2024 season

In 2024, participants reported 42,357 nest attempts (up 18%) from 370 species. We also received data on 501 nests of 169 species from an additional 45 countries in 2024! Here, we summarize these nest record data. Overall participation increased by 29%. What an incredible year for NestWatch!

2024 NESTWATCH SEASON TOTALS

42,357	Nest Attempts
3,444	Participants
370	Species
135,726	Eggs
95,760	Fledglings

TOP 2024 INTERNATIONAL CONTRIBUTORS

Austria

71 nests



Great Britain

67 nests



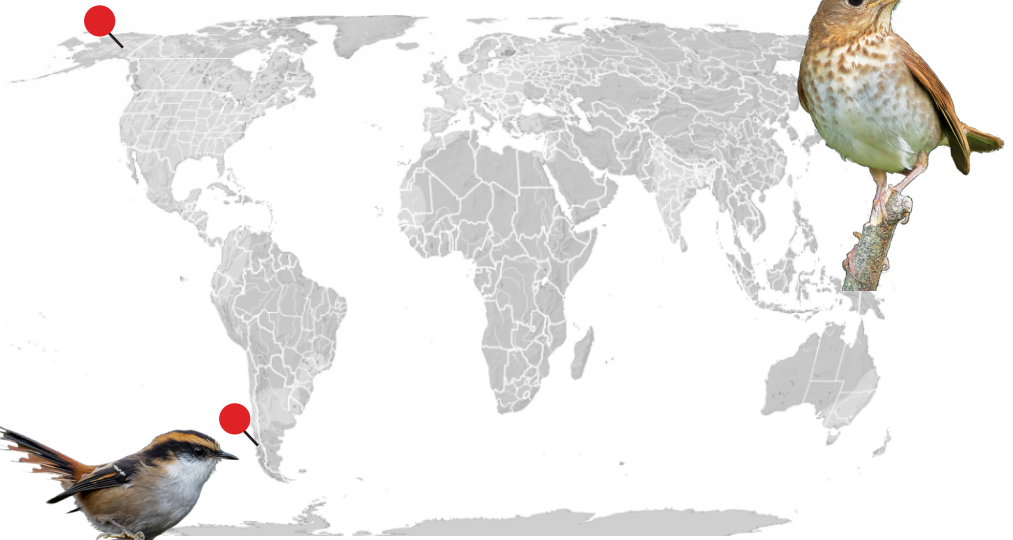
Spain

49 nests



NORTHERNMOST NEST - ALASKA

SWAINSON'S THRUSH (RUSSET-BACKED SUBSPECIES)



SOUTHERNMOST NEST - CHILE

THORN-TAILED RAYADITO

REGIONAL TOTALS

ALASKA AND NORTHERN CANADA

Total nests: 105

Total reported species: 14



SOUTHWEST

Total nests: 3,861

Total reported species: 98



SOUTHEAST AND GULF COAST

Total nests: 8,952

Total reported species: 85



NORTHWEST

Total nests: 2,976

Total reported species: 69



NORTHEAST

Total nests: 23,989

Total reported species: 123



CENTRAL

Total nests: 1,973

Total reported species: 52



Photo credit: Swainson's Thrush (Russet-backed) by Aidan Brubaker / Macaulay Library; Thorn-tailed Rayadito by Tamara Catalán Bermudez / Macaulay Library

Nesting Productivity for Top 16 Species Reported in 2024

Table 1. The average number of fledglings per successful nest (F) and the percentage of successful nests (%) for each region.

Species	Total Nests	Overall		Northeast		Southeast		Central		Northwest		Southwest	
		F	%	F	%	F	%	F	%	F	%	F	%
Eastern Bluebird	14,212	3.91	81.69	3.93	80.51	3.85	83.17	4.18	82.74	-	-	-	-
Tree Swallow	10,309	4.57	81.54	4.51	81.54	4.28	84.05	4.35	68.46	5.12	79.77	4.57	85.55
House Wren	3,287	5.20	81.70	5.16	82.04	5.07	61.29	5.24	85.06	5.84	75.44	5.53	82.76
Purple Martin	1,654	4.12	87.48	4.03	88.24	4.50	85.42	4.34	84.03	4.06	97.22	*	*
American Kestrel	1,342	4.21	72.75	4.16	76.75	*	52.08	4.44	58.82	3.85	56.00	4.37	82.09
Mountain Bluebird	1,233	4.59	78.24	-	-	-	-	*	*	4.61	75.49	4.54	84.33
Western Bluebird	978	4.15	82.63	-	-	-	-	*	*	4.39	66.67	4.12	84.47
Carolina Chickadee	851	4.97	73.95	4.90	67.35	4.98	77.89	*	50.00	-	-	-	-
American Robin	619	2.97	60.47	3.00	60.09	3.00	58.33	3.08	56.52	*	60.00	*	81.82
Carolina Wren	536	4.16	75.98	3.94	74.11	4.24	76.19	4.33	90.91	-	-	-	-
Black-capped Chickadee	428	5.15	71.68	5.36	67.34	4.62	90.48	4.20	68.97	4.09	85.71	*	*
House Finch	292	3.74	70.12	3.73	64.89	3.67	85.00	*	*	*	*	*	57.90
Eastern Phoebe	253	3.79	84.08	3.69	84.26	4.06	83.87	4.00	82.35	-	-	-	-
Bewick's Wren	243	5.23	82.19	-	-	5.27	81.90	-	-	*	*	5.05	85.19
Dark-eyed Junco	230	1.79	63.91	*	*	*	*	*	*	*	50.00	1.50	65.52
Barn Swallow	222	3.73	74.59	3.89	74.07	3.91	86.67	*	*	3.68	72.09	*	*

KEY:

(-) species not present in the region

(*) insufficient data (< 10 nests)

[blue text] indicates a ≥20% increase from 10-year average

[red text] indicates a ≥20% decrease from 10-year average

Pygmy Nuthatches by Christine Haines



"We'd like to be a NestWatch Chapter to be able to share the information we're gathering and [...] to continue teaching schoolkids about birds and their life cycles."

Paola López Contreras, Bosque Palqui NestWatch Chapter, Chile

Crowned Woodnymph nest by Jose Molina



Chapters Celebrating 10 Years in 2024

NestWatch Chapters are hosted by nature centers, parks, wildlife refuges, zoos, and other nature-minded organizations all across the world. These groups help recruit and train NestWatchers in their local communities while using NestWatch to monitor nesting birds as part of their mission. Congratulations to these organizations who started their tenure as a NestWatch Chapter in 2014.

- Biodiversity Research Institute, Gorham, ME
- Thacher Nature Center, Voorheesville, NY
- Tin Mountain Bird Society, Albany, NH

Thank you for your participation!

In The City

Wildlife can be found in all sorts of places, even in urban areas. Check out these birds that participants found nesting among bustling human populations in 2024.

▼ House Finch nest in Longmont, CO, by Lindsay Blank.



▼ Western Kingbirds in Houston, TX, by Walter Allmandinger.



▲ Purple-throated Euphonia in Leticia, Colombia, by Andrea Hinek.



▲ Red-tailed Hawks in New York, NY, by Sunny Correo and the NYC Wildlife Unit.

Community Highlights

After many months of behind-the-scenes work, we officially launched our new bilingual website in 2024, now available in Spanish. We also welcomed our first NestWatch Chapters from Ecuador, Colombia, and Chile in what we hope is the start of an increasing array of partnerships in Latin America. Expanding the NestWatch platform to new geographic areas will broaden our ability to document and study impacts to nesting birds, both across their ranges and in local grassroots efforts. We are also interested in expanding the offerings of nest box plans in our Right Bird, Right House tool, so please **reach out** if you have a suitable plan to contribute for species nesting in Central or South America.

In 2024, NestWatch became the new data entry system for The Peregrine Fund's American Kestrel Partnership, which had formerly maintained a separate database specifically designed for people who monitor American Kestrel nests. We uploaded their ~60,000 historical observations from more than 5,200 American Kestrel nest boxes and other cavities spread across 49 US states, 7 Canadian provinces and territories, and 4 additional countries. This data provides an incredibly detailed snapshot of kestrel breeding activity throughout the species' range in North America and beyond. Bringing the American Kestrel Partnership's database and participants onboard maximizes efficiency for both organizations, creating a consolidated dataset for researchers and single point of data entry for participants.



American Kestrels by Bird Housing Rural Development

Michael Cohn



At Manassas National Battlefield Park in Virginia, the non-profit group **Soldiers2Scientists** is rejuvenating a neglected American Kestrel nest box network (among other projects). Michael Cohn founded Soldiers2Scientists to help get veterans more involved in outdoor community science projects, while also providing meaningful opportunities for career mentorship and community connection. For this project, veterans are working to build new nest boxes, update the map of locations, and assist local ornithologists with collecting data and banding birds. We applaud Soldiers2Scientists for building strong partnerships with local universities, Hawkwatch International, and the Manassas National Battlefield Park Visitor Center to create opportunities for veterans to connect with one another while serving the community. Great work!

"I started as a volunteer in 2013. It inspired me to start bringing veterans out to assist in the maintenance and monitoring of American Kestrel nest boxes. The veterans loved checking the boxes and getting great videos by inserting small cameras to capture females sitting on clutches or feeding young fledglings."

Michael Cohn, Executive Director, Soldiers2Scientists

American Kestrel by Association Québécoise des Fauconniers et Autoursiers



Research Highlights

Eastern Phoebe nest by Linda Ruth



NestWatch staff published a data paper in *Ecology* in 2024 to aid researchers in utilizing the project's raw dataset. The data paper explains all fields and codes used in the database and is necessary for interpreting the NestWatch dataset. Researchers can [download the paper online](#) (see supporting information for metadata). The NestWatch dataset is open access and available for download on [the NestWatch website](#). Next up, we plan to release a statistical package that will help data analysts get started with using the NestWatch dataset.

New research investigated the potential reasons that some birds incorporate shed snake skins into their nests. Cavity-nesting species were found to be 6.5 times more likely to use shed snake skin compared to open cup nesters. Of several hypotheses tested, researchers found that nests with snake skin were less likely to be depredated. Cavity-nesting species show this behavior more often and benefit more from it than do open-cup nesting species. These findings provide a more nuanced understanding of the ecological settings that favor the use of shed snake skin in nest construction.



Great Crested Flycatcher by Bonnie Smith

NestWatch data were used in an examination of gray ratsnake climbing behavior. The study authors were interested in which factors correlate with ratsnake climbing forays, and they wondered if the timing of nests (and thus a seasonal abundance of eggs and nestlings) was an influence. They found that ratsnake movements were not correlated with peak nesting time, consistent with other evidence that ratsnakes primarily prey upon mammals.

Tree Swallows by Ann Janette Vander Ende



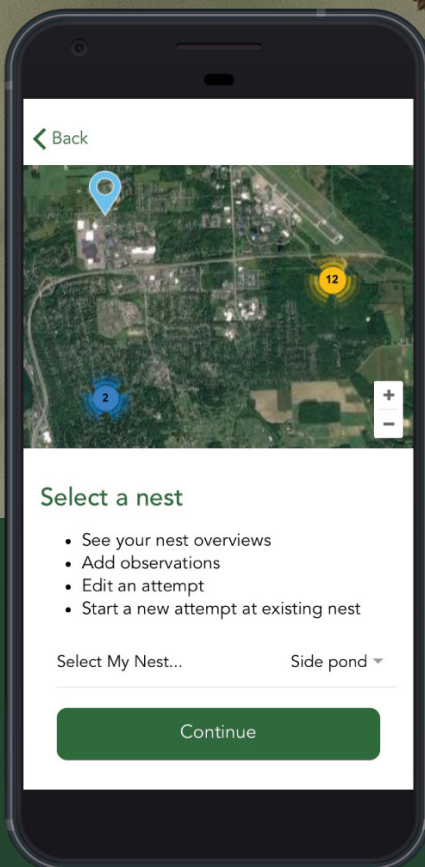
Collect data in the field

Download the NestWatch mobile app today, and input your data directly into NestWatch while you're out checking nests!

English and Spanish language available



Western Bluebird by Massacre Ridge



Download the free NestWatch mobile app today!

Find us on Google Play or the App Store!



Killdeer and chick, by Willapa Wildlife Refuge

Thanks for another great year!

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