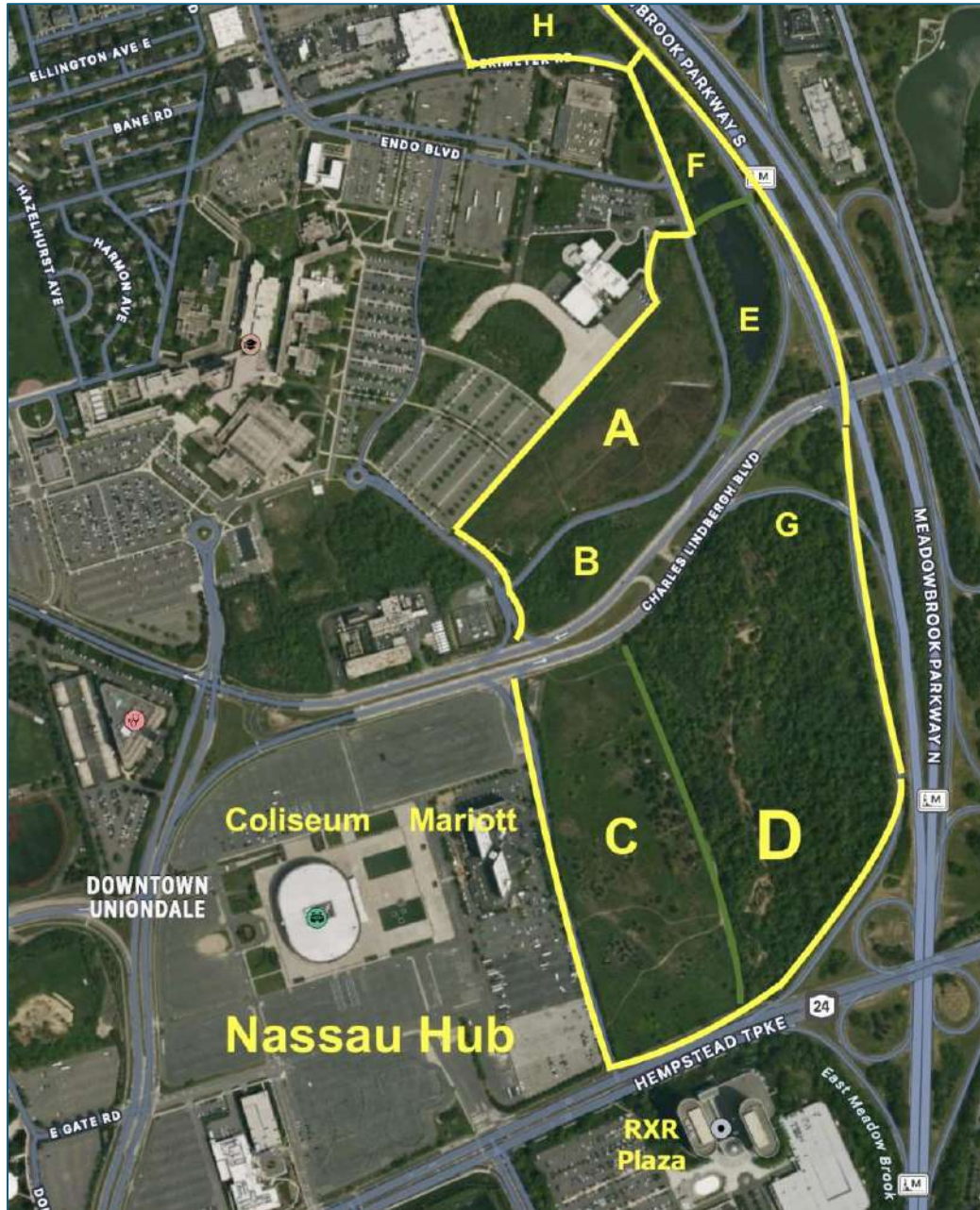


Proposed 100-acre Hempstead Plains Nature Study Area

A larger, more contiguous, and resilient Hempstead Plains Nature Study Area can better diffuse environmental impacts from the Nassau Hub. Simply, more grassland with wooded edge, forest, brook and wetland combined to approx. 100 acres, will be more attractive to grassland specialist birds and wildlife, being conducive to restoring a lush biodiversity of NY native flora and fauna. There aren't many preservable 100-acre tracts left in this part of Nassau County, making this proposal critical.



Parcels A, C, D (but currently not B) have substantial intact acreage of Hempstead Plains grassland. Nevertheless, sections of all 4 parcels (A, B, C, D) should be prioritized to be restored back to Hempstead Plains grassland habitat by selectively replacing invasive plant tracts, successional old field, scrubland and hardwoods with appropriate Hempstead Plains grassland plant species.

There's much to consider for preserving and restoring the following 8 different mini-ecosystems which are adjacent to yet distinctly demarcated from each other. Their proximity makes it possible for us to protect and preserve them as an exemplary series of Nassau County native habitats that reflect our natural heritage as well as our environmental legacy for future generations.

Now, that's not saying these parcels aren't disturbed by man, they all have been. Yet they all retain their own essence of what such diverse ecosystems should each provide in being able to host and harbor obligate flora and fauna ecotypes specific to each parcel - and they all can be carefully cultivated to increasingly restore them into their more natural states incrementally over the years they're under new management by concerned LI environmentalists. Envision them as a natural environmental college campus with distinct habitat classrooms next door to each other, where one can study, learn and marvel at exemplary and authentic ecologies of Long Island nature and wild species specific to each classroom/parcel, all next to each other, one after another.

These 8 discrete areas (marked A to H) exist here, each representing different ecological examples of Nassau County natural habitat variations, all coexisting in the same relatively compact and contiguous geographic area where these varied habitats such as meadows, forests, swamps, and stream provide ecological niches for obligate species of plants, birds, invertebrates, and other LI endemic wildlife.

These 8 different Long Island ecological niches are:

1. **Parcel A: Hempstead Plains Preserve:** Approx. 19 acres of managed grassland with Visitor Center.
2. **Parcel B: Successional Woodland Plot:** Approx. 7 acres of successional Southern hardwoods tapering off into grassland. Hardwoods to be converted to 4-5 acres of Founders Plots for establishing a Nassau County ecotype native seed supply, and for public education.
3. **Parcel C: Purcell Preserve:** Approx 27 acres of unmanaged Hempstead Plains grassland succeeding to scrubland and wooded areas.
4. **Parcel D: East Meadow Brook:** Approx 42 acres. Includes Nassau County's longest stream, the East Meadow Brook, with forest and wetland ecosystems running alongside the Meadowbrook Parkway. This adds valuable biodiversity including LI native woodland and wetland plants, pollinators, and bird species. Parcel D also includes substantial acreage of Hempstead Plains globally rare grassland bisected by dirt bike trails running through a NYS protected wetland.
5. **Parcel E: The Pond and Ravine:** Retention basin and apparent headwaters of the East Meadow Brook.
6. **Parcel F: Woodland Swamp:** Ecologically rich, tangled obligate hydrophytic flora with slow sluices of open water.
7. **Parcel G: Tall Pine-Oak Grove:** Slightly higher land with tallest, presumably oldest and most distinct stand of majestic pines and oaks within view - a bountiful ecosystem for obligate wildlife species.
8. **Parcel H: Sunken Forest:** Stand at eye level with birds foraging in the crowns and upper canopies of numerous trees that grow no taller than the ridge encircling them. In the flood basin below lies an ephemeral waterhole that's part of the hydrology of the East Meadow Brook headwaters.



As different as the 8 ecosystems are, yet they are all here and woven tightly into this tapestry of the Nassau County environments that need the surrounding municipalities and communities to join together to preserve, nurture and protect these special places for the benefit of wildlife and people, to conserve a remembrance of Nassau County's natural heritage and a lasting legacy for generations to come. If we don't, who will?

30 Endangered, Threatened, Rare Grassland Obligate Species

Existing remnant patches of Hempstead Plains grassland are surrounded by urban development and illegal garbage dumping has been common. It is extremely vulnerable to further development and associated disturbances. It has been colonized by invasive exotic species, and successional shrublands or successional southern hardwoods.

However, adequate protection, restoration, proper management, and no further development in and around the sites, should allow the Hempstead grassland's viability to improve.²⁰

LI Grassland Specialist Birds Endangered: 1, Threatened: 3, Special Concern: 3, High Priority: 2

#	Common Name	Scientific Name	Species Status
1.	Short-eared Owl	<i>Asio flammeus</i>	NY/LI Endangered ¹
2.	Northern Harrier	<i>Circus hudsonius</i>	NY/LI Threatened ²
3.	Upland Sandpiper	<i>Bartramia longicauda</i>	NY/LI Threatened ²
4.	Henslow's Sparrow	<i>Centronyx henslowii</i>	NY/LI Threatened ²
5.	Horned Lark	<i>Eremophila alpestris</i>	NY/LI Special Concern ³
6.	Vesper Sparrow	<i>Pooecetes gramineus</i>	NY/LI Special Concern ³
7.	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	NY/LI Special Concern ³
8.	Bobolink	<i>Dolichonyx oryzivorus</i>	NY/LI High Priority ⁴
9.	Eastern Meadowlark	<i>Sturnella magna</i>	NY/LI High Priority ⁴

¹: Endangered native species in imminent danger of extirpation or extinction in NYS.

²: Threatened native species likely to become an NYS endangered species within the foreseeable future.

³: Native species for which a welfare concern or risk of endangerment has been documented in NYS.

⁴: High Priority Species of Greatest Conservation Need

Source: NYS DEC

Pollinators of the Hempstead Plains Preserves Threatened: 1, Critically Imperiled: 1

#	Common Name	Scientific Name	Species Status
10.	Frosted Elfin	<i>Callophrys irus</i>	NY/LI Threatened ⁷
11.	Hand-maid Moth	<i>Datana ranaecephs</i>	NY/LI Critically Imperiled

Plants of the Hempstead Plains Preserves Endangered: 4, Threatened: 14, Rare:1

#	Common Name	Scientific Name	Species Status
12.	Sandplain Gerardia	<i>Agalinis decemloba</i>	Fed & NY Endangered ^{5,6}
13.	Soapwort Gentian	<i>Gentiana saponaria</i>	NY/LI Endangered ^{6,9}
14.	Eastern Silvery Aster	<i>Symphotrichum concolor</i>	NY/LI Endangered ^{6,9}
15.	Britton's Coast Violet	<i>Viola brittoniana</i>	NY/LI Endangered ⁶
16.	Stargrass	<i>Aletris farinosa</i>	NY/LI Threatened ⁷
17.	Purple Milkweed	<i>Asclepias purpurascens</i>	NY/LI Threatened ⁷
18.	Green Milkweed	<i>Asclepias viridiflora</i>	NY/LI Threatened ⁷
19.	Midland Sedge	<i>Carex mesochorea</i>	NY/LI Threatened ⁷
20.	Bushy Rock Rose	<i>Crocanthemum dumosum</i>	NY/LI Threatened ⁷
21.	Low Rock Rose	<i>Crocanthemum propinquum</i>	NY/LI Threatened ⁷
22.	Small-leaved Trefoil	<i>Desmodium ciliare</i>	NY/LI Threatened ⁷
23.	Narrowleaf Bush Clover	<i>Lespedeza angustifolia</i>	NY/LI Threatened ⁷
24.	Nuttall's Milkwort	<i>Polygala nuttallii</i>	NY/LI Threatened ⁷
25.	Blunt Mountain Mint	<i>Pycnanthemum muticum</i>	NY/LI Threatened ⁷
26.	Few-flowered Nutrush	<i>Scleria pauciflora</i>	NY/LI Threatened ⁷
27.	Narrowleaf Whitetop Aster	<i>Sricocarpus linifolius</i>	NY/LI Threatened ⁷
28.	Hyssopleaf Hedge Nettle	<i>Stachys hyssopifolia</i>	NY/LI Threatened ⁷
29.	Northern Gama Grass	<i>Tripsacum dactyloides</i>	NY/LI Threatened ⁷
30.	Birds-foot Violet	<i>Viola pedata</i>	NY/LI Rare ⁸

⁵: Listed as Endangered under the Federal Endangered Species Act.

⁶: Listed as Endangered by NYS: In imminent danger of extirpation in NY.

⁷: Listed as Threatened by NYS: Likely to become Endangered in the foreseeable future.

⁸: Listed as Rare by NYS: Likely to become Threatened in the near future.

⁹: Considered extirpated. Conservation translocation/reintroduction candidate.

Source: New York Natural Heritage Program

²⁰ Source: guides.nynhp.org/hempstead-plains-grassland/



Breeding Birds of the Hempstead Plains

How many bird species raise their families on Long Island? Most people guess way too low.

You may be surprised to learn, 146 bird species reunite on Long Island after a long winter apart, fall in love all over again (many species are monogamous) in spring, and raise their families here during the productive months of May, June, July, into August.²¹

Of the 146 Long Island breeding birds, **at least 50 nest and raise young in the 100-acre HPNSA.**

Breeding Birds of the Hempstead Plains		
1. Mallard	18. Common Raven	35. American Goldfinch
2. Rock Pigeon	19. Black-capped Chickadee	36. Chipping Sparrow
3. Mourning Dove	20. Tufted Titmouse	37. Field Sparrow
4. Chimney Swift	21. Tree Swallow	38. Savannah Sparrow
5. Ruby-throated Hummingbird	22. White-breasted Nuthatch	39. Song Sparrow
6. Killdeer	23. Blue-gray Gnatcatcher	40. Swamp Sparrow
7. Red-bellied Woodpecker	24. House Wren	41. Eastern Towhee
8. Downy Woodpecker	25. Carolina Wren	42. Eastern Meadowlark
9. Hairy Woodpecker	26. European Starling	43. Baltimore Oriole
10. Northern Flicker	27. Gray Catbird	44. Red-winged Blackbird
11. American Kestrel	28. Brown Thrasher	45. Brown-headed Cowbird
12. Eastern Kingbird	29. Northern Mockingbird	46. Common Grackle
13. White-eyed Vireo	30. Wood Thrush	47. Common Yellowthroat
14. Warbling Vireo	31. American Robin	48. American Redstart
15. Red-eyed Vireo	32. Cedar Waxwing	49. Yellow Warbler
16. Blue Jay	33. House Sparrow	50. Northern Cardinal
17. American Crow	34. House Finch	51. Indigo Bunting

Most likely, a dozen more species including raptors and owls nest here too, keeping their nests hidden in hard-to-find spots. This raises an important point to understand about many wild species of birds that still nest on Long Island – they cannot easily adapt to human encroachment. That’s why we must preserve more natural and somewhat undisturbed areas (like the HPNSA) that provide privacy and respectful boundaries so they will feel equally at home in Nassau County, as much as we do raising our own families here.

²¹ New York State Department of Environmental Conservation (NYSDEC). *New York State Breeding Bird Atlas III*. More info: <https://www.dec.ny.gov/animals/7312.html> and <https://ebird.org/atlasny/home>.

New York State Wildlife Action Plan for 2025-2035

The US Endangered Species Act of 1973: Designed by Congress to protect critically imperiled species and to halt and reverse the trend toward species extinction caused by unscrupulous economic growth and development untempered by adequate concern and conservation. The purpose of the ESA is:

- 1) to prevent extinction, and
- 2) to recover species to the point where the law's protections are no longer needed, and
- 3) to get there, the ESA also protects ecosystems upon which listed species depend.

State Wildlife Action Plans (SWAPs) are updated with USFWS every 10 years. SWAPs serve to prevent species from becoming federally endangered. To be eligible for federal wildlife conservation funding, a SWAP must identify Species of Greatest Conservation Need, identify the habitats they require, and prescribe recommended actions to address the threats to ensure the conservation of SGCN, before they become too rare or costly to restore.

Of 79 birds on NY's 2025-35 SWAP, **34 imperiled species below require habitat found within the 100-acre HPNSA** and can benefit from conservation action and habitat improvement here so as not to become endangered species in NY.

Conservation action to establish a 100-acre Hempstead Plains Nature Study Area will also benefit several hundred other native birds, other wildlife species and native plants whose populations in Nassau County have been declining sharply, but not sharp enough yet to be listed as the highest state priorities on NY's SWAP plan such as these birds are:

Endangered Imminent danger of extirpation or extinction in NYS.	Legend: G: Grassland; F: Forest; W: Wetland
1. Loggerhead Shrike	G
2. Short-eared Owl	G
Threatened Likely to become a NYS endangered species within the foreseeable future.	
3. Common Nighthawk	G
4. Yellow-breasted Chat	F
5. Kentucky Warbler	F
6. Least Bittern	W
7. Upland Sandpiper	G
8. Sedge Wren	G
9. Henslow's Sparrow	G
Special Concern A welfare concern or risk of endangerment has been documented in NYS.	
10. Peregrine Falcon	
11. Bald Eagle	F, W
12. Northern Harrier	G, W
13. Barn Owl	G, W
14. American Bittern	W
15. Red-shouldered Hawk	W
16. Red-headed Woodpecker	F
17. Horned Lark	G
18. Vesper Sparrow	G
19. Grasshopper Sparrow	G
High Priority Species of Greatest Conservation Need	
20. American Black Duck	W
21. Bay-breasted Warbler	F
22. Bobolink	G
23. Brown Thrasher	F
24. Canada Warbler	F
25. Cape May Warbler	F
26. Eastern Meadowlark	G
27. Northern Bobwhite	G
28. Olive-sided Flycatcher	W
29. Prothonotary Warbler	W
30. Rusty Blackbird	W
Proposed New SGCN for 2025-35	
31. American Kestrel	G
32. Greater Yellowlegs	W
33. Long-eared Owl	F
34. Tennessee Warbler	F

Learn more: <https://dec.ny.gov/nature/animals-fish-plants/biodiversity-species-conservation/state-wildlife-action-plan>

National Audubon Flight Plan for 2023-2028

The Audubon Flight Plan for 2023-28 will “bend the bird curve” from a 50-year steep decline into an upward curve by 2028 for bird populations that migrate throughout the Western Hemisphere. Birds have no borders. Depending on species, migrants travel en masse from Antarctica, South America, Central America, the Caribbean, North America, up to the Arctic Circle and Alaska to raise their families – and back again each year.

Across the Western Hemisphere, 188 “Indicator Species” have been identified by Audubon. As any Indicator Species population curve bends upward due to priority habitat improvement across the Americas, that bird also “indicates” that multiple other bird and wildlife species that use the same ecosystems are improving as well.

Of the total 188, **40 declining species listed below require habitat found in the 100-acre HPNSA** and can benefit from conservation action and habitat improvement that will bend the bird curve up for their populations here in Nassau County.

To improve the HPNSA for the indicator species below, will also mean that many other bird, flora and fauna species that share the HPNSA will improve, as well as the overall ecosystem and water quality.

	Audubon Indicator Species	Legend: G: grassland, F: forest, W: wetland, U: Urban
1.	American Bittern	W
2.	American Black Duck	W
3.	American Kestrel	G, F
4.	American Woodcock	F
5.	Bald Eagle	F, W
6.	Bay-breasted Warbler	F
7.	Black-billed Cuckoo	F
8.	Blackpoll Warbler	F
9.	Bobolink	G
10.	Canada Warbler	F
11.	Chimney Swift	F, U
12.	Dickcissel	G
13.	Eastern Meadowlark	G
14.	Grasshopper Sparrow	G
15.	Henslow's Sparrow	G
16.	Kentucky Warbler	F
17.	Lark Bunting	G
18.	Least Bittern	W
19.	Loggerhead Shrike	G
20.	Long-billed Dowitcher	W
21.	Mourning Warbler	F
22.	Northern Bobwhite	G
23.	Northern Harrier	G, W
24.	Northern Pintail	W
25.	Olive-sided Flycatcher	F
26.	Painted Bunting	F
27.	Prairie Warbler	F
28.	Prothonotary Warbler	F
29.	Purple Martin	G, W
30.	Red-headed Woodpecker	F
31.	Rose-breasted Grosbeak	F
32.	Rufous Hummingbird	F
33.	Rusty Blackbird	W
34.	Scarlet Tanager	F
35.	Short-eared Owl	G
36.	Upland Sandpiper	G
37.	Wood Thrush	F
38.	Yellow Warbler	F
39.	Yellow-billed Cuckoo	F
40.	Yellow-breasted Chat	F

View the National Audubon Flight Plan for 2023–28: https://media.audubon.org/2024-01/WEB_Strat%20Plan%20Overview_Jan04.pdf