Data Entry Project

and

Some Analysis of Historical Huntley Meadows Park Avian Observations

Kurt Gaskill

First, a little history;

- 1261 acres transferred to Fairfax County in April 1975 (program was initiated by President Nixon and the transfer finalized by President Ford)
- In 1978, Gary Roisum was the first Huntley Meadows Park employee
- Through the offices of Gary Roisum, Fairfax County began developing the land for the park in 1980
- In 1992 an additional 165 acres along Dogue Creek (Edgewood Acres) were added

1980 Aerial View of Huntley Meadows Park

5/22/2026

1:28,056

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, NASA, NGA, USGS, FEMA

Fairfax County Historical Imagery Viewer

1980: Woodcock Meadow and Main Pond

5/22/2026

1:14,056

0 0.07 0.15 0.3 mi

0 0.15 0.3 0.6 km

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Fairfax County Historical Imagery Viewer

Evan Pannkuk, HMP, 12/2024

*Also see Meanley, No Amer Fauna **67**, viii, 108 (1969)*

King Rail

Imperiled in VA

Habitat: Freshwater marshes, upland-wetland marsh edges, ricefields or similar flooded farmlands, shrub swamps; Big Cordgrass, Olney's Three-square and Cattail (1-3 m tall).

Nest: Elevated platform, often with a canopy and ramp, attached to plants growing in shallow water (0-25 cm) or placed in a tussock or other waterside vegetation. Territory 2-16 ha.

Nesting Details: Clutch size 6-15 (commonly 8-11) eggs. Incubation 21-24 days, by both sexes. Young tended by both parents, leave nest soon after hatching, first fly at about 9 weeks

Diet: Crustaceans, insects and other invertebrates, small fishes, tadpoles, seeds of weeds and aquatic plants, grain.

Species information obtained from NatureServe Explorer and references therein; https://explorer.natureserve.org/Search

Mike Cianciosi, HMP, 4/2025

Pied-billed Grebe

Critically imperiled in VA

Habitat: In eastern U.S., occurs in ponds, sloughs, and marshes, in marshy inlets and along edges of rivers, lakes, and reservoirs, and occasionally in estuarine wetlands.

Nest: Floating nest in shallow water anchored to surrounding dense vegetation, especially cattail and bulrush, and are farther from shore than from open water. Territory 1-5 ha.

Nesting Details: Clutch size 2-10 eggs, incubation 22-27 days. Adults usually divide broods (rides on back first week) and provision chicks with a variety of small-sized prey, including dragonfly naiads, dytiscid beetle larvae, leeches, and salamanders. First flight about 35 days.

Diet: Opportunistic carnivores, the diet being dominated by crayfish, insects (primarily Odonates (dragonflies), Heteroptera (true bugs), Coleoptera (beetles)) and fish (24%)

Evan Pannkuk, HMP, 4/2021

Common Gallinule

Critically imperiled in VA

Habitat: Freshwater marshes, canals, quiet rivers, lakes, ponds, mangroves, primarily in areas of emergent vegetation and grassy borders; taro patches in Hawaiian Islands.

Nest: Floating among marsh plants over water and anchored, occasionally in shrub in or near water. Builds nestlike platforms on which to brood young. Territory about 2 ha.

Nesting Details: Clutch size 4-17 (usually 7-12) eggs, incubation 19-22 days. First flight about 35 days.

Diet: Eats seeds, grass, rootlets, soft parts of water plants, snails, insects

Ben Jesup, HMP, 6/2025

Yellow-crowned Night-Heron

Imperiled in VA

Habitat: Marshes, swamps, lakes, lagoons, and mangroves; chiefly coastal.

Nest: In trees (10-60 feet) in wooded situations near water, occasionally in arid scrub on islands; sometimes on ground. Nested 8-23 m up in loblolly pines in Virginia, 20-1100 m from water, primarily in highly populated residential areas. Foraging distance can be over a km.

Nesting Details: Clutch size 2-5 eggs, incubation 27 days, young leave nest in about 30-37 days (which is through flight).

Diet: Mostly crayfishes and crabs, also other small aquatic animals; **feeds exclusively on crustaceans in the eastern and southern U.S**. Forages in shallows or among marsh vegetation, sometimes along river and pond margins.

Peyton Stone, HMP, 5/2026

American Bittern

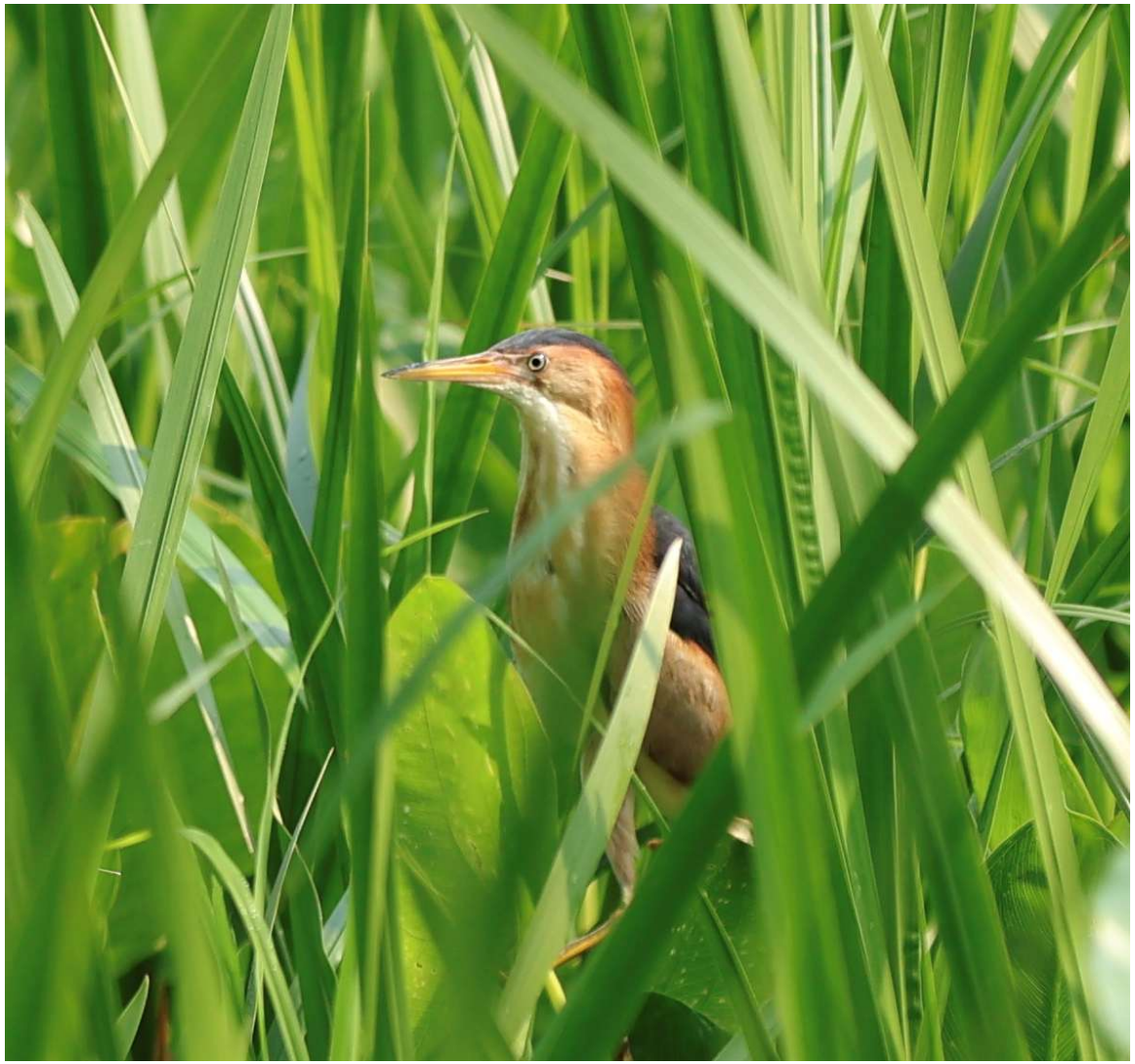
Critically imperiled in VA

Habitat: Primarily large freshwater marshes, including lake and pond edges where cattails, sedges, or bulrushes are plentiful with patches of open water and aquatic-bed vegetation. Also, in shrubby marshes, bogs, wet meadows. Readily uses wetlands created by impoundments.

Nest: Platform of reeds, sedges, and cattail, lined with fine grasses. Usually on the ground, in a tussock, a few inches above water, or are floating; surrounded by water, and have dense, overhead cover. Area has tall emergent vegetation. Wetlands of 2.5 ha or more may support nesting.

Nesting Details: Clutch size 2-7 (usually 3-5) eggs, incubation 24-28 days, young leave nest in about 14 days. First flight 7-8 weeks after hatching.

Diet: Eats mainly fishes, crayfishes, amphibians, mice and shrews, insects, and other animals.



Peyton Stone, Dyke Marsh, 6/2025

Least Bittern

Vulnerable in VA

Habitat: (NE U.S.) mainly in wetlands along lakes, rivers, and estuaries on the coastal plain. Readily uses artificial wetlands.

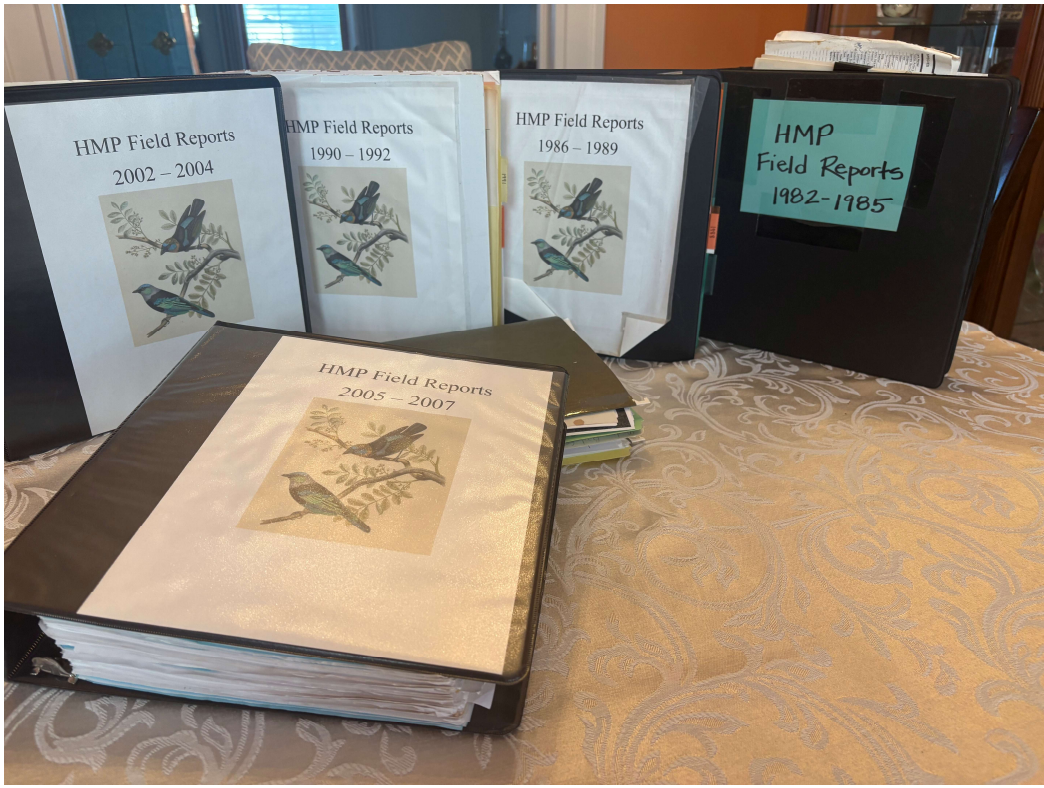
Nest: Nest on elevated platform hung from vegetation over water in dense, tall growths of emergent vegetation, particularly cattail, sedge, bulrush, and, common reed, interspersed with open water. The “hemi-marsh” condition appears to be ideal. Nesting habitat of 5+ ha likely required, territory about 1 nest per ha.

Nesting Details: Clutch size 2-7 (usually 4-5) eggs, incubation 17-20 days. Young leaves the nest in 5-15 (usually 10) days. First flight 25-29 days.

Diet: Small fishes, amphibians, leeches, slugs, snails, crustaceans, insects, occasionally small mammals. Highly insectivorous esp. aquatic prey.

Details on Data Entry

- Downloaded existing Fairfax Co data from Ebird
- Obtained paper records of HMP Field Reports
  - Courtesy of Annika MacDonald and Chris King, Resource Management Office
- Data entry process using lists from select individuals:
  - Ken Howard (Oct. 3, 1995)
  - Ed Weigel (Oct. 20, 1995)
  - Eric Hynes
  - Andy Higgs
  - Erika Wilson
  - Fred Atwood
  - Larry Cartwright
  - Others
    - ✓ Defined Ebird names and passwords
- Data Entry from 1983 to 2000 plus a few extra >2000
- Annotated data with breeding codes as appropriate
- Valuable Help from Volunteers:
  - Karen Pao
  - Liz Train
  - Erika, Fred and Larry entered their own lists

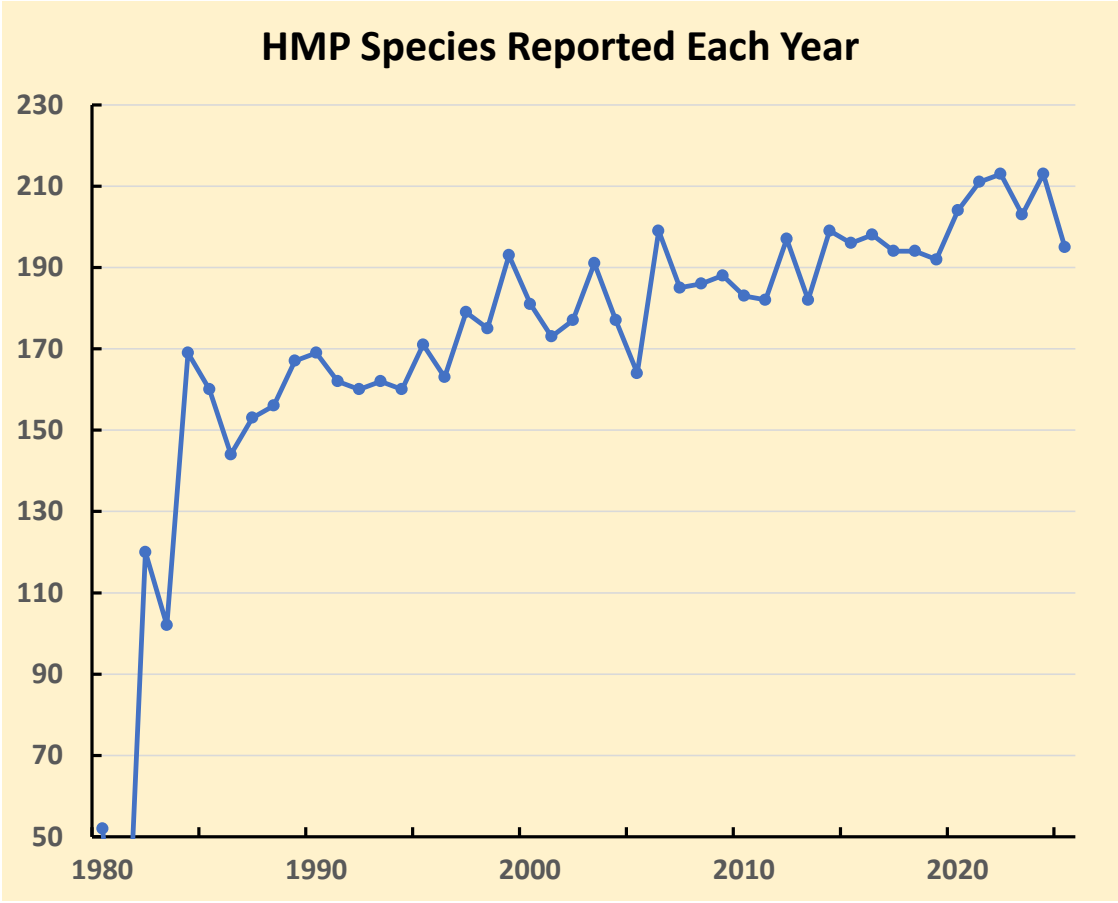


Results of Data Entry

Some Rarities added to HMP species list:

- Chuck-wills-widow, 4/27/84, E. Wilson
- Clapper Rail, 5/7-8/89, K. Howard and E. Weigel
- Black-necked Stilt, 5/20/97, J. Agee and E. Howe
- Least Tern, 6/22/99, Bill Dobbins and then Bob Boxwell
- Swallow-tailed Kite, 6/18/99, Eric Hynes + others
- Long-eared Owl, 1/29/99, Eric Hynes

Lists:		complete
Wiegel and Howard	837	701
Hynes and Higgs	300	275
Birdathon	27	27
Other	51	20
Erika Wilson	150	150
Fred Atwood	34	34
Larry Cartwright (est)	150	150
Total:	1549	1357



Trends for Least Bittern

Virginia Breeding Safe Dates:
June 15 – Aug 14

- **Breeding was confirmed for several years**

1984	PROB	2005	
1985	PROB	2006	
1986	PROB	2007	
1987	CONF	2008	POSS? ← Present June 1-9
1988	CONF	2009	POSS ← Present last week of July
1989	CONF	2010	
1990	PROB	2011	
1991	CONF	2012	
1992	CONF	2013	
1993		2014	POSS† ← Present June 10, 17
1994	POSS† ← Present for one day, July 3	2015	
1995		2016	
1996		2017	
1997		2018	
1998		2019	
1999		2020	
2000	POSS† ← Present for one day, June 19	2021	
2001		2022	
2002		2023	
2003		2024	
2004		2025	PROB — Pair Present June 6 – July 22

Trends for Least Bittern

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1988	CONF	2009
1989	CONF	2010
1990	PROB	2011
1991	CONF	2012
1992	CONF	2013
1999		2020
2000	POSS†	2021
2001		2022
2002		2023
2003		2024
2004		2025

POSS? ← Present June 1-9

POSS ← Present last week of July

POSS† ← Present June 10, 17

Least Bittern is secretive.
How was breeding confirmed?

Present for one day, July 3

Present for one day, June 19

PROB — Pair Present June 6 – July 22

Least Bittern Breeding Surveys

On Foot in Marsh & viewing from tower

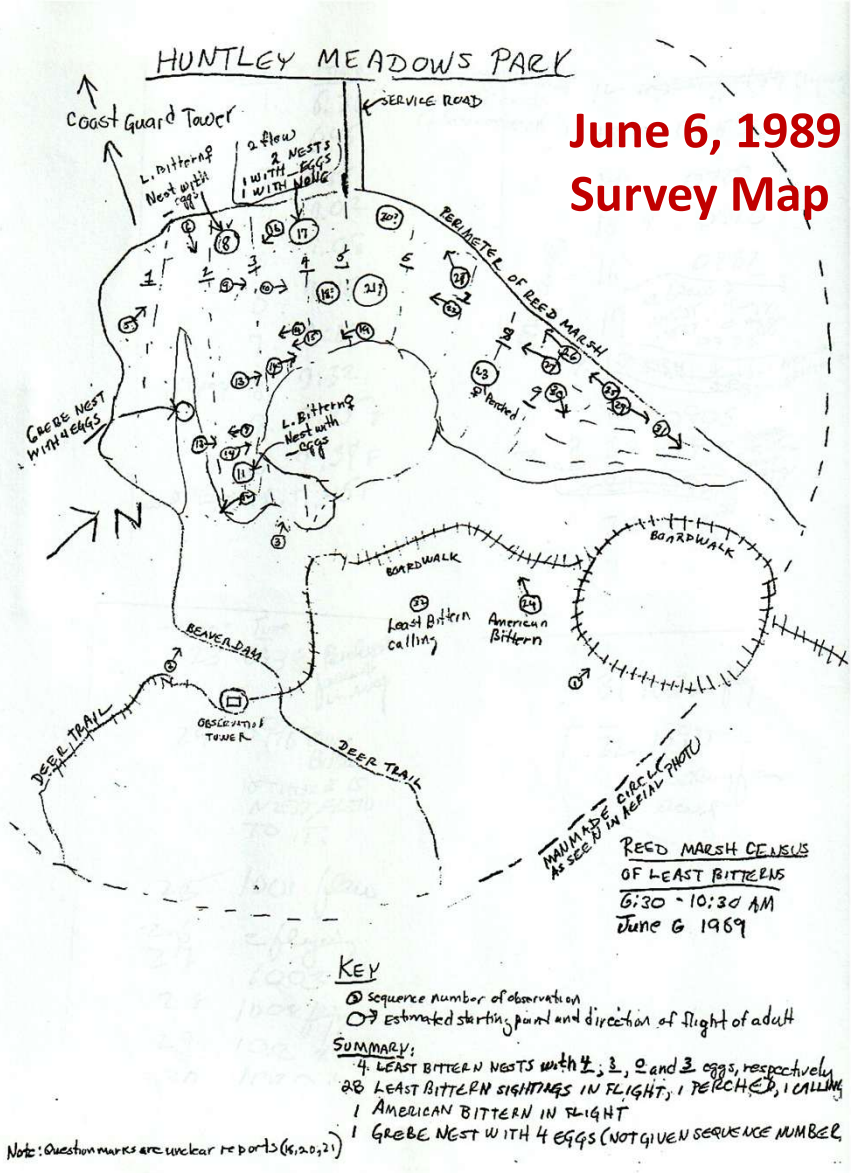
- June 20, 1987
- June 29, 1988
- June 6, 1989

Findings:

- June 6: 8 adults
  - ✓ NE of 4, 3, 0, 3; also, PBGR NE 4 eggs
- June 20: 4 adults
  - ✓ NE of 5; also, PBGR NB
- June 29: 8 adults
  - ✓ NE of 4, 5, and 4; NY 2/3 size; also, King Rail DD
- Nests and nest placement described
  - ✓ Total area of 19.3 acres (7.8 ha)
  - ✓ 4.8 acres (1.9 ha) per nest (consistent w/ literature)
- Note extent of reed marsh

Other years:

- ***1991 FL obs on 7/26***
- ***1992 2 juv obs on 7/31***



Trends for Least Bittern

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June 15 – Aug 14

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1984	PROB	2005
1985	PROB	2006
1986	PROB	2007
1987	CONF	2008
1988	CONF	2009
1989	CONF	2010
1990	PROB	2011
1991	CONF	2012
1992	CONF	2013
1993		2014
1998		2019
1999		2020
2000	POSS†	2021
2001		2022
2002		2023
2003		2024
2004		2025

What changed after 1992?

POSS? ← Present June 1-9

POSS ← Present last week of July

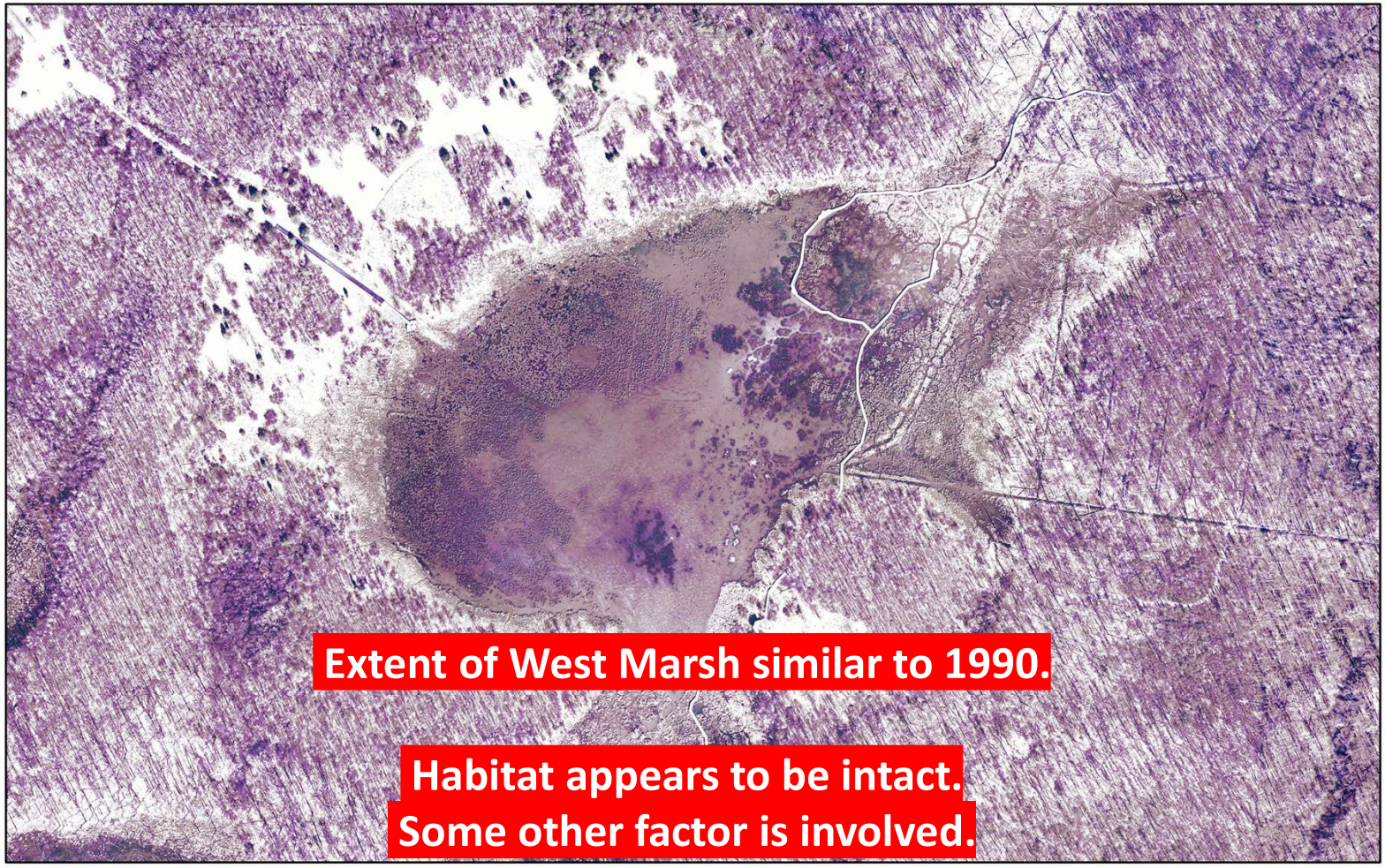
POSS† ← Present June 10, 17

Present for one day, July 3

Present for one day, June 19 → 2000

PROB — Pair Present June 6 – July 22

1997



11/5/2025

1:5,078

0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Fairfax County Historical Imagery Viewer

Trends for Least Bittern

Virginia Breeding Safe Dates:
June 15 – Aug 14

- **Why these scattered one- and few-day records during the breeding season?**

1984	PROB	2005	
1985	PROB	2006	
1986	PROB	2007	
1987	CONF	2008	POSS? — Present June 1-9
	CONF	2009	POSS — Present last week of July; ➢ Post-breeding dispersal?
	CONF	2010	
	PROB	2011	
	CONF	2012	
	CONF	2013	
		2014	POSS† — Present June 10, 17
1994	POSS†	2015	
1995		2016	
1996		2017	
1997		2018	
1998		2019	
1999		2020	
2000	POSS†	2021	
2001		2022	
2002		2023	
2003		2024	
2004		2025	PROB — Pair Present June 6 – July 22

Present for one day, July 3

Present for one day, June 19

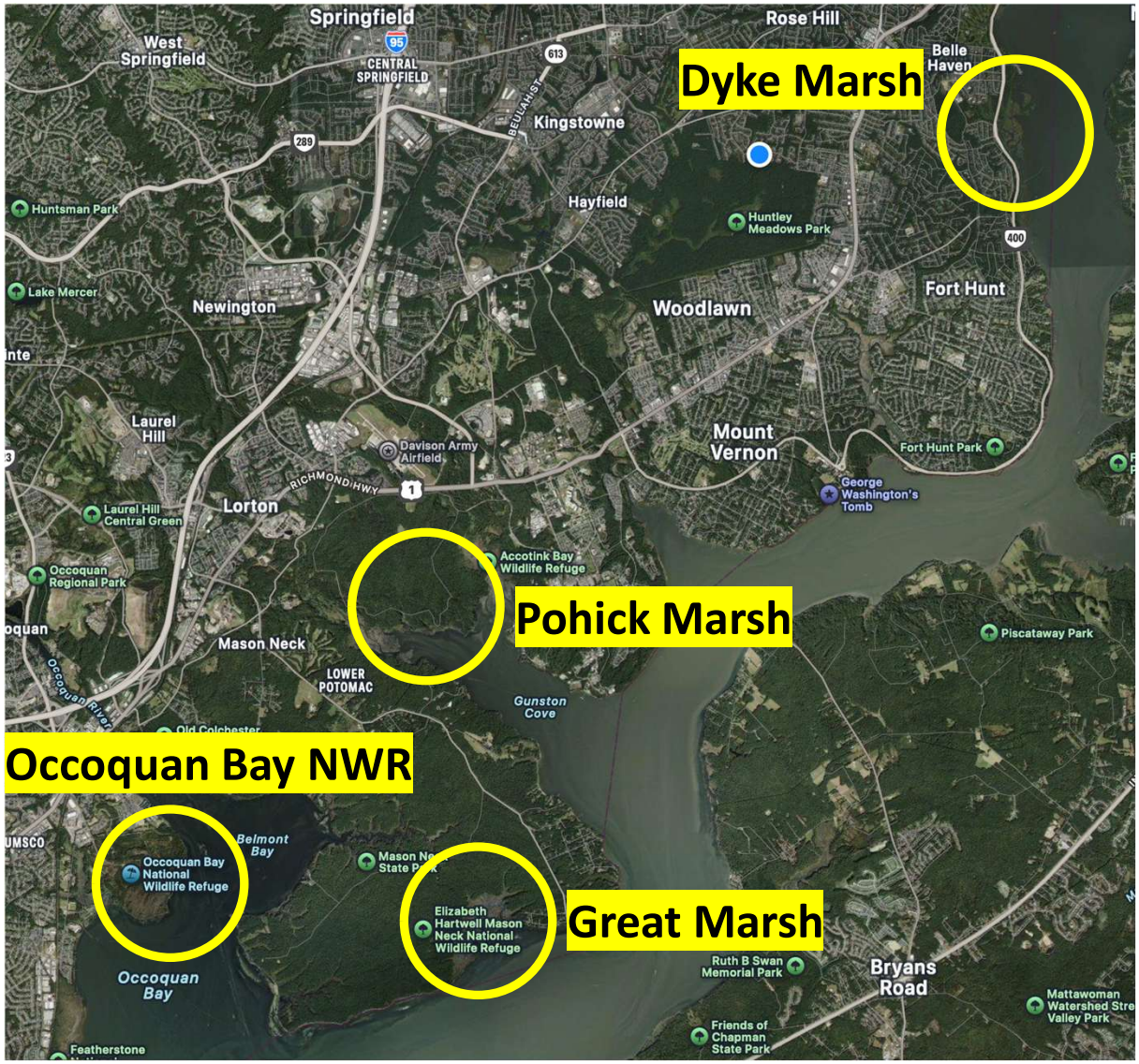
Potential Least Bittern Sources

Dyke Marsh: well-known breeding area, first Ebird record 1977

Occoquan Bay NWR: 1997

Pohick Marsh: first report 2008

Great Marsh of Mason Neck: first report in 2019



Potential Least Bittern Sources

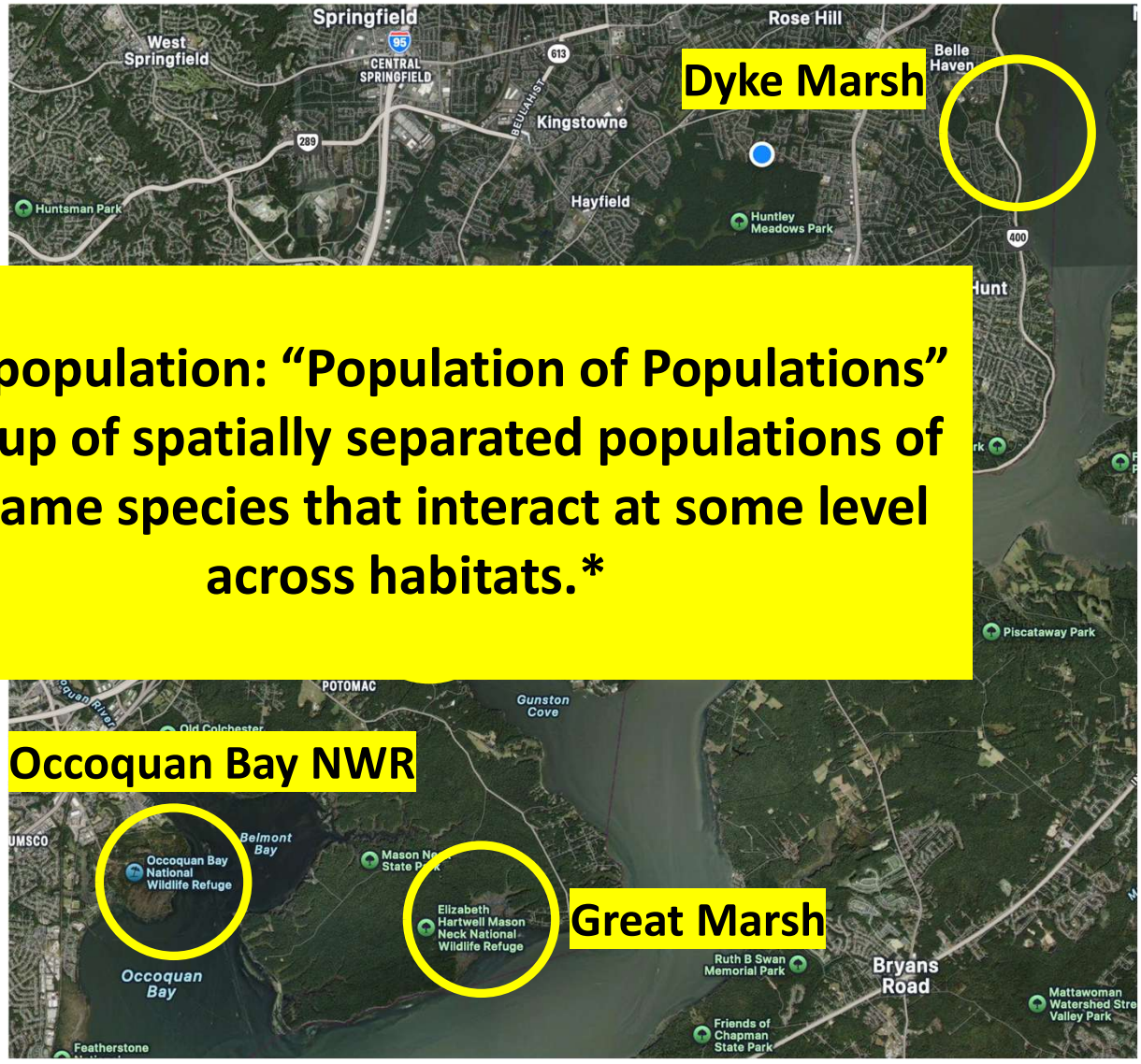
Dyke Marsh: well-known bre… area, first Ebird record 1977

Occoquan Bay NWR: 1997

Pohick Marsh: first report 20…

Great Marsh of Mason Neck: first report in 2019

Metapopulation: "Population of Populations"
A group of spatially separated populations of the same species that interact at some level across habitats.*



R. Levins, Bull. Ento. Soc. America, 15, 237 (1969)

Trends for Least Bittern

Virginia Breeding Safe Dates:
June 15 – Aug 14

- **Why the lack of reports after 2014?**

1984	PROB	2005	
1985	PROB	2006	
1986	PROB	2007	
1987	CONF	2008	POSS?
	CONF	2009	POSS
	CONF	2010	
	PROB	2011	
	CONF	2012	
	CONF	2013	
1993		2014	POSS†
1994	POSS†	2015	
1995		2016	
1996		2017	
1997		2018	
1998		2019	
1999		2020	
2000	POSS†	2021	
2001		2022	
2002		2023	
2003		2024	
2004		2025	PROB

Present June 1-9

Present last week of July

- Post-breeding dispersal?

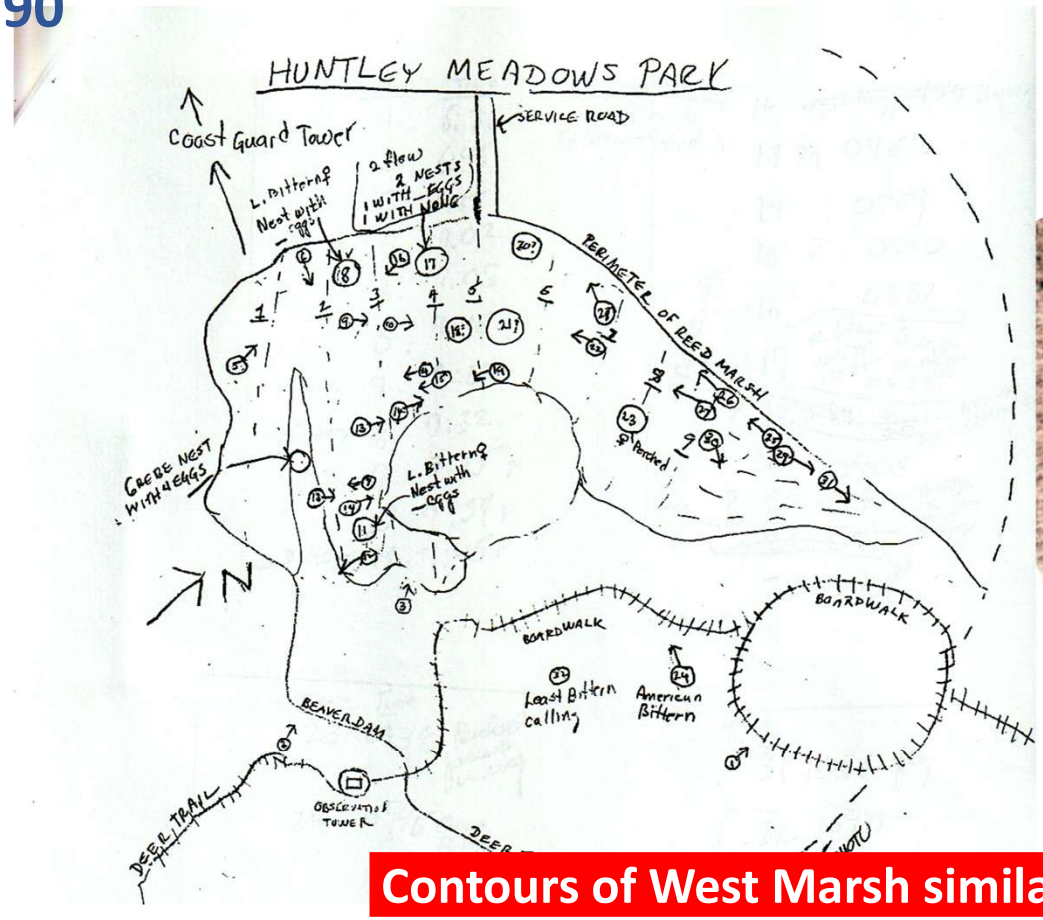
Present June 10, 17

Present for one day, July 3

Present for one day, June 19

Pair Present
June 6 – July 22

1990



Contours of West Marsh similar to survey sketch.

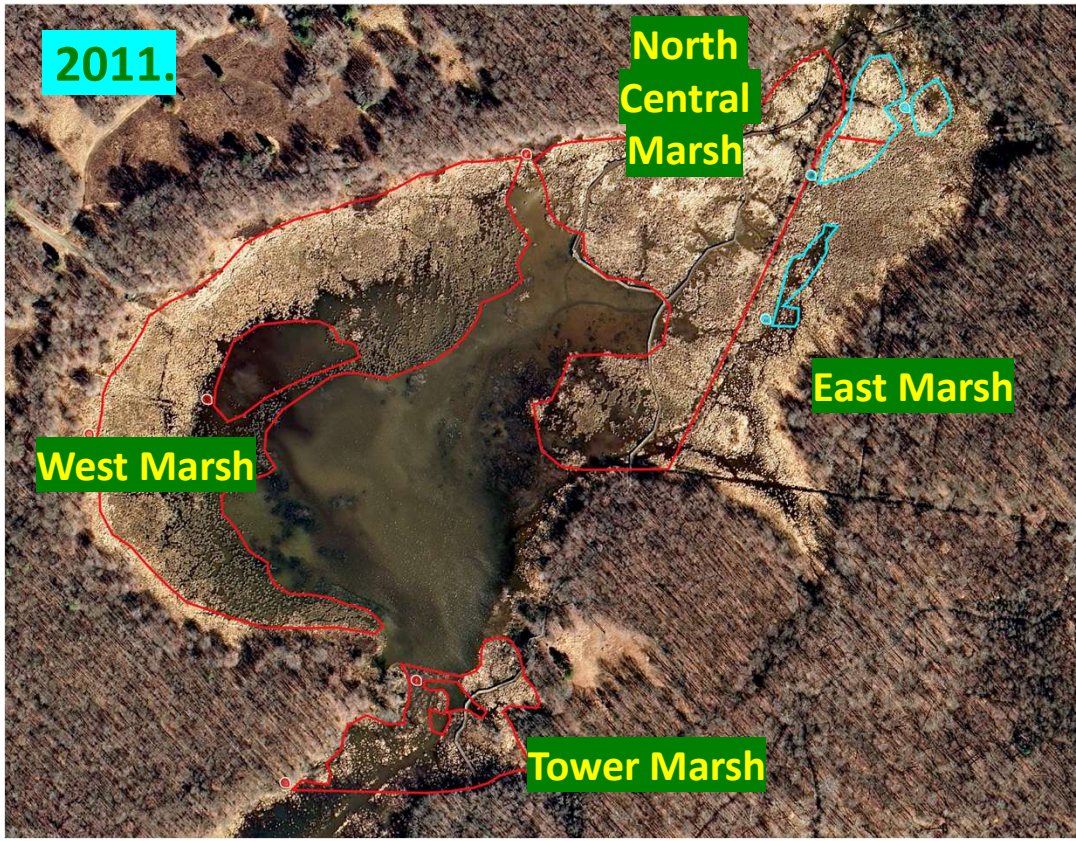
We can use aerial photos to measure marsh area.

Marsh Area Changes

- ❑ **Fairfax Co. aerial images are scaled and also have geo-data embedded; enables area determination**
- ❑ **Analyze aerial images using Adobe Acrobat Pro**

<u>Findings</u>:

- ➢ 2007: West Marsh (**<u>19+ acres!</u>**) begins collapsing
- ➢ 2011: East Marsh begins collapsing
- ➢ 2013: North Central Marsh starts fragmenting
- ➢ 2015: West Marsh collapsed; Tower Marsh gone
- ➢ 2017: East Marsh collapsed
- ➢ 2025: Main Pond marshes no longer dominated by Reeds; swamp loosestrife (Decodon verticillatus) becomes important



Trends for Least Bittern

Virginia Breeding Safe Dates: June 15 – Aug 14

Marsh habitat persists to 2014 to entice potential breeders; but not afterwards

1984	PROB	2005	
1985	PROB	2006	
1986	PROB	2007	
1987	CONF	2008	
	CONF	2009	
	CONF	2010	
	PROB	2011	
	CONF	2012	
	CONF	2013	
		2014	
1994	POSS†	2015	
1995		2016	
1996		2017	
1997		2018	
1998		2019	
1999		2020	
2000	POSS†	2021	
2001		2022	
2002		2023	
2003		2024	
2004		2025	PROB

West Marsh collapsing

Present June 1-9

POSS?

POSS

Present last week of July

- Post-breeding dispersal?

POSS†

Present June 10, 17

Present for one day, July 3

Present for one day, June 19

Pair Present June 6 – July 22

Trends for Least Bittern

Virginia Breeding Safe Dates: June 15 – Aug 14

Marsh habitat persists to 2014 to entice potential breeders; but not afterwards

1984	PROB
1985	PROB
1986	PROB
1987	CONF
	CONF
	CONF
	PROB
	CONF
	CONF
1994	POSS†
1995	
1996	
1997	
1998	
1999	
2000	POSS†
2001	
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	
2021	
2022	
2023	
2024	
2025	PROB

Present for one day, July 3

Present for one day, June 19

Yet, in 2025 a pair of Least Bitterns persisted

West Marsh collapsing

POSS? Present June 1-9

POSS Present last week of July

- Post-breeding dispersal?

POSS† Present June 10, 17

PROB Pair Present June 6 – July 22

2025

11/5/2025

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Fairfax County Historical Imagery Viewer

Pair of Least Bitterns were foraging in this habitat, but…
It is not a typical breeding habitat.

Trends for American Bittern

Virginia Breeding Safe Dates:
May 22 – Aug 14

- Breeding confirmed for 4 years, Number and dates of FL recorded.
- A rare event in Virginia!

June 16	1984	POSS	2005		
	1985		2006	POSS†	May 28
	1986		2007		
	1987		2008		
	1988		2009		
	1989	CONF	2010	POSS	July 7-11
	1990	CONF	2011		
	1991		2012		
	1992	CONF	2013		
June 26	1993	POSS†	2014		
	1994		2015		
	1995		2016		
July 8	1996	POSS†	2017	POSS†	June 3
	1997		2018		
	1998	CONF	2019		
June 5	1999	POSS†	2020		
	2000		2021		
	2001		2022		
June 17	2002	POSS†	2023	POSS†	June 20
July 12	2003	POSS†	2024		
	2004		2025	POSS	May 26 & 29

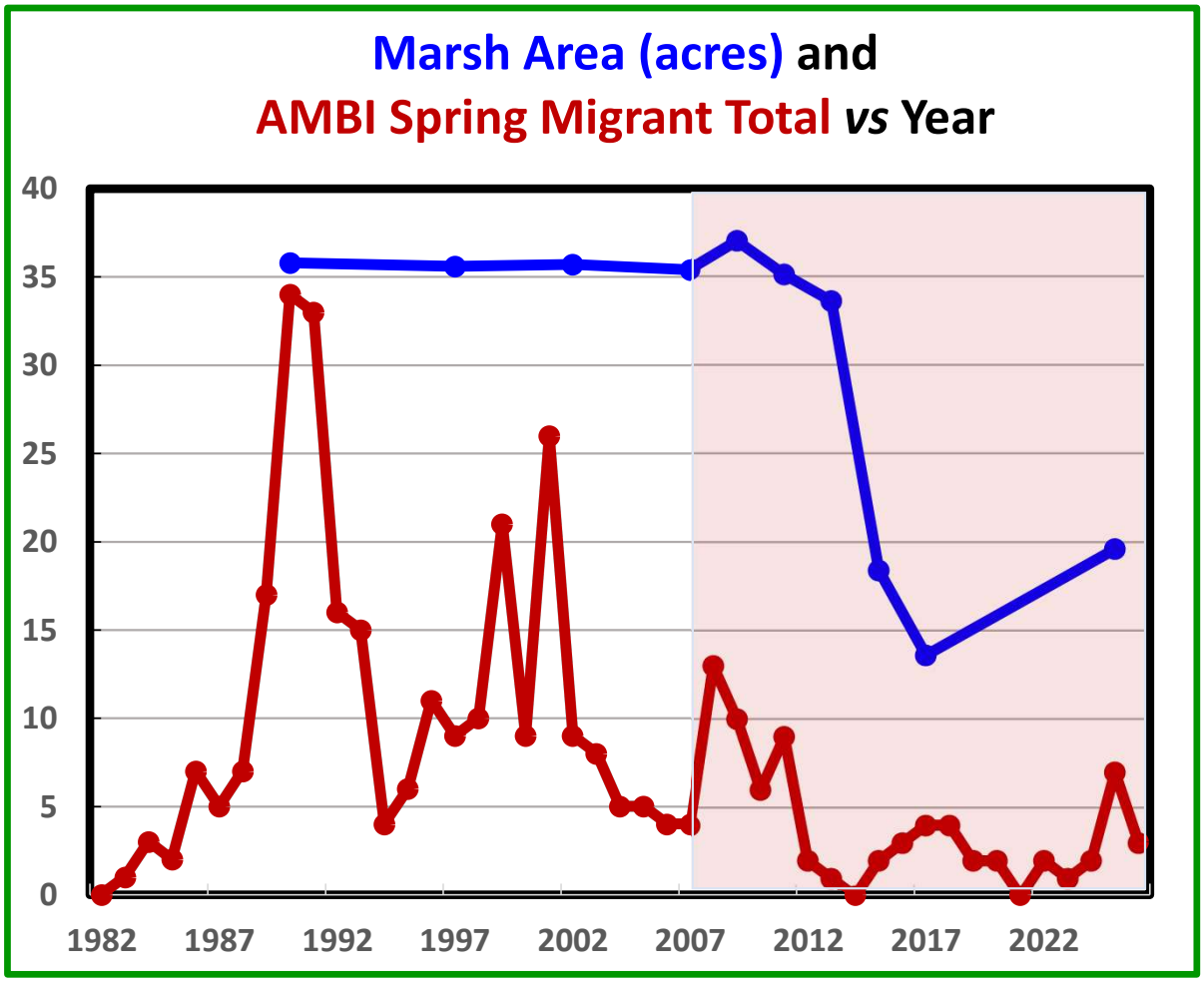
Trends for American Bittern

Virginia Breeding Safe Dates:
May 22 – Aug 14

- **Breeding confirmed for 4 years**
- **Migration in new Edgewood Acres parcel noted April 1991 (Agee and Regan)**
- **Yet, habitat loss affects overall migration**
  - **Sum the weekly high total of spring migrants for each year and compare to marsh area**

June 16	1984	POSS	2005		
	1985		2006	POSS†	May 28
	1986		2007		
	1987		2008		
	1988		2009		
	1989	CONF	2010	POSS	July 7-11
	1990	CONF	2011		
	1991		2012		
	1992	CONF	2013		
			2014		
June 26	1993	POSS†	2015		
	1994		2016		
	1995		2017	POSS†	June 3
July 8	1996	POSS†	2018		
	1997		2019		
	1998	CONF	2020		
June 5	1999	POSS†	2021		
	2000		2022		
	2001		2023	POSS†	June 20
June 17	2002	POSS†	2024		
July 12	2003	POSS†	2025	POSS	May 26 & 29
	2004				

Some Implications of Marsh Changes: *Reduced Migration* of Some Species



Trends for American Bittern

Virginia Breeding Safe Dates:
May 22 – Aug 14

- Breeding confirmed for 4 years
- Several single- and few-day observations during breeding season.
- Concurrent observations in Fairfax Co.
  - Dyke Marsh 7/11/2002
  - Dyke Marsh 7/2/2010
  - Mason District Park 6/1/2025

June 16	1984	POSS	2005		
	1985		2006	POSS†	May 28
	1986		2007		
	1987		2008		
	1988		2009		
	1989	CONF	2010	POSS	July 7-11
	1990	CONF	2011		
	1991		2012		
	1992	CONF	2013		
			2014		
June 26	1993	POSS†	2015		
	1994		2016		
	1995		2017	POSS†	June 3
July 8	1996	POSS†	2018		
	1997		2019		
	1998	CONF	2020		
June 5	1999	POSS†	2021		
	2000		2022		
	2001		2023	POSS†	June 20
June 17	2002	POSS†	2024		
July 12	2003	POSS†	2025	POSS	May 26 & 29
	2004				

Trends for American Bittern

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June 16	1984	POSS	2005		
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	1986		2007		
	1987		2008		
	1988		2009		
	1998	CONF	2019		
June 5	1999	POSS†	2020		
	2000		2021		
	2001		2022		
June 17	2002	POSS†	2023	POSS†	June 20
July 12	2003	POSS†	2024		
	2004		2025	POSS	May 26 & 29

Another example of Metapopulation:
"Population of Populations"
…but now, a nearby site may be
Barnyard Run/Dogue Creek

Trends for King Rail

Virginia Breeding Safe Dates:
April 22 – Aug 21

- Successful Breeding 1985 thru 1999
- Also confirmed in 2009 and 2016

- Using first appearance of fledged young, we can detect a pattern implying double brooding

	1984	PROB	2005		
	1985	CONF	2006		
	1986	CONF	2007		
	1987	CONF	2008	PROB	1 fr April 22 thru June 4
	1988	CONF	2009	CONF	
	1989	CONF	2010	POSS†	July 26
	1990	CONF	2011	POSS†	June 11
	1991	CONF	2012		
	1992	CONF	2013		
	1993	CONF	2014	PROB	P or T on May 26
	1994	CONF	2015		
	1995	CONF	2016	CONF	
	1996	CONF	2017		
	1997	CONF	2018		
	1998	CONF	2019		
May to Early August	1999	CONF	2020	POSS†	May 5
	2000	PROB	2021		
June 16-23	2001	PROB	2022		
	2002		2023		
	2003		2024		
	2004		2025	POSS†	June 14

Timing of King Rail Fledglings

Year	April #1	April #2	April #3	April #4	May #1	May #2	May #3	May #4	June #1	June #2	June #3	June #4	July #1	July #2	July #3	July #4
1985												1				
1986														1		
1987								1								
1988												DD	1 & 2			
1989														1	2	
1990									1			2				
1991								1				2				
1992						1										2
1993									1						2	
1994												1				
1995			1									2				
1996																1
1997								1					2			
1998					1			2							3 & 4	
1999														1		

Trends for King Rail

Virginia Breeding Safe Dates:
April 22 – Aug 21

- Successful Breeding 1985 thru 1999
- Also confirmed in 2009 and 2016
- First brood range is mid April thru Early June
- Second brood range is late June thru July
  - ✓ Gaps due observer bias or nest failure
- Upper bound to breeding territory: 4.4 ha
  - ✓ Used total of Tower, West and North Central Marsh areas
  - ✓ Consistent with literature

1984	PROB	2005		
1985	CONF	2006		
1986	CONF	2007		
1987	CONF	2008	PROB	1 fr April 22 thru June 4
1988	CONF	2009	CONF	
1989	CONF	2010	POSS†	July 26
1990	CONF	2011	POSS†	June 11
1991	CONF	2012		
1992	CONF	2013		
1993	CONF	2014	PROB	P or T on May 26
1994	CONF	2015		
1995	CONF	2016	CONF	
1996	CONF	2017		
1997	CONF	2018		
1998	CONF	2019		
1999	CONF	2020	POSS†	May 5
2000	PROB	2021		
2001	PROB	2022		
2002		2023		
2003		2024		
2004		2025	POSS†	June 14

Trends for King Rail

Virginia Breeding Safe Dates:
April 22 – Aug 21

- Breeding thru 1999
- Valient attempt in 2000 but reduced occurrence in 2001
- Fragmented one- and few-day records afterwards
  - ✓ Similar to Least and American Bitterns
  - ❑ Metapopulation movement

	1984	PROB	2005		
	1985	CONF	2006		
	1986	CONF	2007		
	1987	CONF	2008	PROB	1 fr April 22 thru June 4
	1988	CONF	2009	CONF	
	1989	CONF	2010	POSS†	July 26
	1990	CONF	2011	POSS†	June 11
	1991	CONF	2012		
	1992	CONF	2013		
	1993	CONF	2014	PROB	P or T on May 26
	1994	CONF	2015		
	1995	CONF	2016	CONF	
	1996	CONF	2017		
	1997	CONF	2018		
	1998	CONF	2019		
May to Early August	1999	CONF	2020	POSS†	May 5
	2000	PROB	2021		
June 16-23	2001	PROB	2022		
	2002		2023		
	2003		2024		
	2004		2025	POSS†	June 14

Trends for King Rail

Virginia Breeding Safe Dates:
April 22 – Aug 21

- Breeding thru 1999
- Otherwise, Metapopulation Effects

1984	PROB	2005		
1985	CONF	2006		
1986	CONF	2007		
1987	CONF	2008	PROB	1 fr April 22 thru June 4
1988	CONF	2009	CONF	
1995	CONF	2016	CONF	
1996	CONF	2017		
1997	CONF	2018		
1998	CONF	2019		
1999	CONF	2020	POSS†	May 5
2000	PROB	2021		
2001	PROB	2022		
2002		2023		
2003		2024		
2004		2025	POSS†	June 14

In 2009, obs from June 8 thru August & 3 FL 7/25

- ***Only 2 reports in April (10 & 12) otherwise, no reports in April & May!***

Trends for King Rail

Virginia Breeding Safe Dates:
April 22 – Aug 21

- **Breeding thru 1999**
- **Otherwise, Metapopulation observations**

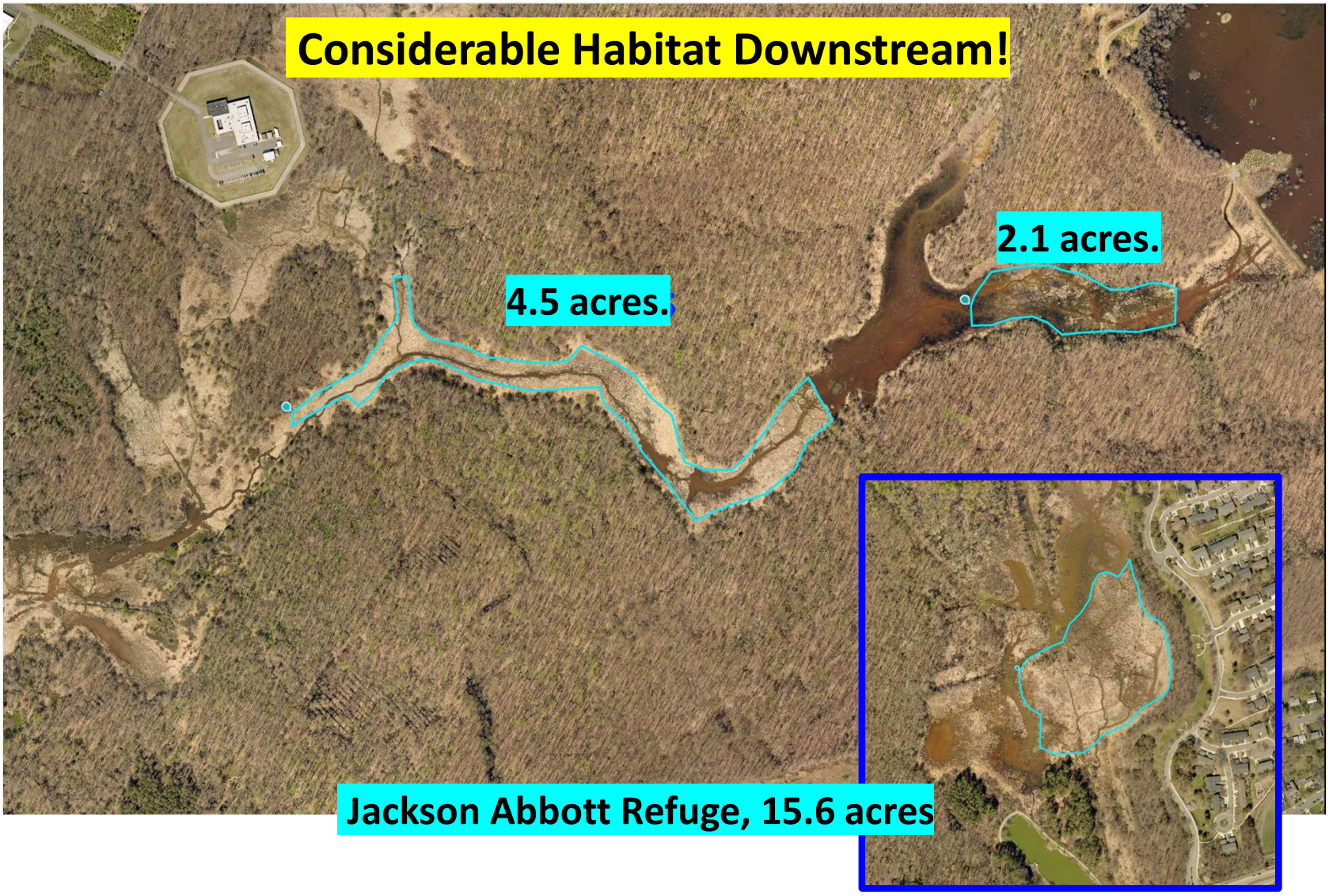
- **In 2009, obs from June 8 thru August & 3 FL**
  - ***Only 2 reports in April (10 & 12) otherwise, no reports in April & May!***

1984	PROB	2005		
1985	CONF	2006		
1986	CONF	2007		
1987	CONF	2008	PROB	1 fr April 22 thru June 4
1988	CONF	2009	CONF	
1989	CONF	2010	POSS†	July 26
1990	CONF	2011	POSS†	June 11
1991	CONF	2012		
1992	CONF	2013		
1993	CONF	2014	PROB	P or T on May 26
1994	CONF	2015		
1995	CONF	2016	CONF	

- But, the **2016 Confirmation is unusual…**
- **No reports until July 17** with adult and FL observed; followed by sporadic reports to Aug 18
  - **<u>FL are flightless for first 8 weeks</u>**
  - Adult begins flightless period as early as July (4 weeks)

- **Walked in from Barnyard Run/Dogue Creek!**

2017


Considerable Habitat Downstream!
2.1 acres.
4.5 acres.
Jackson Abbott Refuge, 15.6 acres

Common Gallinule

1984	CONF
1985	PROB
1986	PROB
1987	CONF
1988	POSS
1989	PROB

- Very Uncommon Breeder in Virginia (Tidewater)
- Nest Building and Fledgling dates at HMP
- Very late migrant in 1999, 2000, and 2011

Pied-billed Grebe

- Breeding Confirmed 1984 to 1992
  - ✓ NB, NE, & FL
- Limited attempts after 1992
  - ✓ Long-staying single or pairs in 2008 & 2014
  - ✓ One-day pairs in 2011, 2012
- Lack of suitable breeding habitat after 2014
- Pattern similar to Least Bittern
- Metapopulation movement

1984	CONF	2005	
1985	CONF	2006	
1986	CONF	2007	
1987	CONF	2008	PROB
1988	CONF	2009	
1989	CONF	2010	
1990	CONF	2011	PROB†
1991	CONF	2012	PROB†
1992	CONF	2013	
1993		2014	PROB
1994		2015	
1995		2016	
1996	POSS	2017	POSS
1997		2018	POSS
1998		2019	
1999		2020	
2000	POSS†	2021	
2001		2022	
2002		2023	
2003		2024	
2004		2025	

Common Gallinule

1984	CONF
1985	PROB
1986	PROB
1987	CONF
1988	POSS
1989	PROB

- Very Uncommon Breeder in Virginia (Tidewater)
- Nest Building and Fledgling dates at HMP
- Very late migrant in 1999, 2000, and 2011

Yellow-crowned Night-Heron

- Confirmed 1985 thru 1992
  - ✓ Then 1997 and 2017
  - ✓ 2024 technically NB, but abandoned the next day
- Sightings become sporadic after 1992
  - ✓ Single birds in 1995, 96 & 98
  - ✓ Single or a few observations in 2007, 2011 & 2020-2023
  - ✓ Decline in crustacean density?

Have obtained Fairfax Co breeding phenology:

CN: 3/27 to 4/13
NB: 3/30 to 4/11
ON: 4/11 to 5/24
NY: 6/4 to 6/23
FL: 6/21 to 7/30

1984	POSS
1985	CONF
1986	PROB
1987	CONF
1988	CONF
1989	CONF
1990	CONF
1991	CONF
1992	CONF
1993	PROB
1994	POSS
1995	POSS
1996	POSS
1997	CONF
1998	POSS
1999	POSS
2000	PROB
2001	PROB
2002	PROB
2003	POSS
2004	
2005	
2006	PROB
2007	POSS†
2008	
2009	
2010	
2011	POSS†
2012	
2013	
2014	POSS
2015	
2016	
2017	CONF
2018	
2019	
2020	POSS†
2021	POSS
2022	POSS
2023	POSS†
2024	CONF
2025	PROB

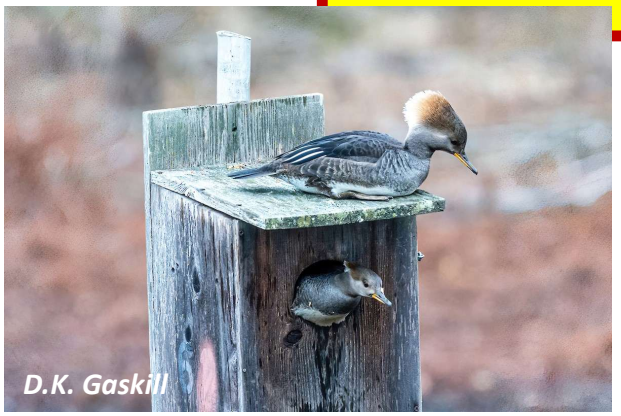
NB but quit in one day

Lastly, Some Other Interesting Records:

- Virginia Rails have bred in 2008 & 2009
- Several mid-breeding season records: Metapopulation

- Hooded Merganser first successfully bred in 1996
- Starting in 1998, have been successful in every year to today

- Brown Creeper successfully bred in 1984, 1987 & 1989
- The last breeding attempt was in 1993



Summary

- **Breeding of several uncommon marsh species annotated in Ebird**
- **Correlation of marsh area with migrants and breeding attempts**
- **One- and few-day occurrence of species during breeding period points to Metapopulation movement from nearby breeding locations**
- **The marshes of Barnyard Run and Dogue Creek may be a source of uncommon marsh species; also has productive breeding habitat**

Recommendations

- Evaluate the health of the Barnyard Run and Dogue Creek marshes; take actions as needed
- Restore reed-based marsh in the main pond
- Periodic census of Barnyard Run and Dogue Creek for uncommon marsh species, esp. April thru June
- Recommend monitoring water quality, underwater soil health, & crustacean population

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eBird. 2025. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org. (Accessed: July 26, 2025).

This is a 2003 abstract concerning Least Bittern nesting sites in Reelfoot lake , Tennessee. Relatively little is known about Ixobrychus exilis (Least Bittern) nesting sites. We searched for Least Bittern nests on Reelfoot Lake and nearby Black Bayou Waterfowl Refuge, TN, May-July 2003. We located 8 nests at Reelfoot Lake, where Decodon verticillatus (swamp loosestrife) dominated emergent communities. We also discovered 2 nests at Black Bayou, where Zizaniopsis miliacea (giant cutgrass) dominated emergent communities. D. verticillatus was the dominant plant species within 60 m of most nests. Z. miliacea dominated within 5 m of most nests, and most nests were made of Z. miliacea. We found a nest with 2 white-colored chicks and 2 ochre-colored chicks, which may be the first such instance reported.