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## EXTIRPATION OF THE BUDGERIGAR (*Melopsittacus undulatus*) FROM FLORIDA

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**Abstract.**—Native to Australia, Budgerigars (*Melopsittacus undulatus*) have been extremely popular cagebirds for more than 150 years. Beginning in the 1950s, large numbers reportedly were released in Pinellas County, along Florida's central Gulf coast. By the late 1970s, a large and thriving population, containing perhaps 20,000 or more individuals, was breeding abundantly in western Pasco, Pinellas, Hillsborough, Manatee, and Sarasota counties. This population, which subsequently spread to Hernando County, began a severe decline in the 1980s, with fewer than 100 individuals remaining by the mid-1990s. The final remnant flocks survived for an additional ~20 years in Hernando and Pasco counties before becoming extirpated in 2014. In an earlier paper (Pranty 2001), I summarized the history of Budgerigars in Florida through January 2001. Here, I document their continued decline through the disappearance of the last individuals, and I provide thoughts on the likely causes of their extirpation. As the Budgerigars in west-central Florida represented the only large, breeding population found outside their native range, their extirpation represents the loss of a regularly-occurring species in the Western Hemisphere. The history of Budgerigars in Florida proves well that even large and robust populations of exotic birds can disappear decades after their founding.

The Budgerigar (*Melopsittacus undulatus*) is a small (18 cm, 30-40 gram) psittacid native to much of the arid interior of Australia. It has been bred in captivity since the 1840s (Forshaw 1977) and is the third most abundant pet worldwide after the domestic cat (*Felis silvestris catus*) and the domestic dog (*Canis lupus familiaris*). Despite their abundance in captivity, the only large and persistent breeding population found outside their native range was located along the central Florida Gulf coast. This population was founded by 1960 and persisted for more than 50 years before becoming extirpated in 2014.

The early history of Budgerigars in Florida is clouded by a lack of specific information. Cooke and Knappen (1940:177) stated simply that “a number” of free-flying individuals had been observed in California

and Florida. Large numbers reportedly were released in Pinellas County, along Florida's central Gulf coast, beginning in the 1950s (Lipp 1963, Shapiro 1979, Wenner and Hirth 1984)—but claims of large-scale releases were from second- or third-hand sources. Budgerigars began breeding in Pinellas County “as early as the 1950s” (Robertson and Woolfenden 1992:85) or around 1960 (Lipp 1963, Stevenson and Anderson 1994).

Free-flying Budgerigars were first noted on a Christmas Bird Count (CBC) at St. Petersburg, Pinellas County, in December 1962, and the compiler wrote that “hundreds” of individuals were “now feral” (Woolfenden 1963). Dill (1981) claimed that the first flocks in western Pasco County were found in 1963. CBC data show that Budgerigars were found in numbers in western Manatee County by December 1966 (Bradenton CBC), western Sarasota County by December 1974 (Sarasota and Venice–Englewood CBCs), and northwestern Hillsborough County by January 1977 (Tampa CBC; all Table 1). By the late 1970s, the population numbered perhaps 20,000 or more individuals found along the coast to ca. 10 km inland, from Hudson, Pasco County through Venice, Sarasota County, a distance of 160 km (Pranty 2001). Another flock was discovered in southwestern Hernando County in December 1991 (Aripeka–Bayport CBC; Table 1). The populations in Hernando and Hillsborough counties were thought to have spread naturally from those in Pasco and Pinellas counties, respectively, but the populations in Manatee and Sarasota counties were more likely the result of locally released or escaped Budgerigars that subsequently bred widely outside of captivity. In contrast to the assessments of others (e.g., Wenner and Hirth 1984, Stevenson and Anderson 1994), I consider the Budgerigars found in 26 other counties in Florida—Alachua, Bay, Brevard, Broward, Charlotte, Citrus, Collier, Dixie, Duval, Escambia, Franklin, Highlands, Lee, Leon, Levy, Miami-Dade, Monroe, Okaloosa, Orange, Palm Beach, Polk, Putnam, St. Lucie, Santa Rosa, Seminole, and Wakulla (Pranty 2001, 2003; Greenlaw et al. 2014)—to have represented local escapees or releases unrelated to the large and persistent breeding population found along the central Gulf coast.

Robertson and Woolfenden (1992:85) referred to Pasco and Pinellas counties as the Budgerigar's (former) “heartland” and mentioned that their numbers and range were “much reduced” compared to earlier decades. Stevenson and Anderson (1994) predicted the species' eventual extirpation from Florida. In an earlier paper (Pranty 2001), I used CBC and other data to document the massive population increase and range expansion of Budgerigars through the 1970s, followed by an equally considerable population decline and range contraction through the 1980s and 1990s. In this paper, I document the continued decline and range contraction of Budgerigars in Florida through the disappearance of the last individuals, in April 2014, and I close with final thoughts on the likely causes of their extirpation.

**Table 1.** Budgerigars recorded on all published Christmas Bird Counts in Florida, December 1962–January 2015. A total of 22 CBCs in Florida contained at least one Budgerigar report; these CBCs are arranged alphabetically by two-letter code (with counties in italics): AB = Aripeka–Bayport (*Hernando* and *Pasco*); all Budgerigars in *Hernando*; BC = Bay County (*Bay*); BD = Bradenton (*Manatee*); BK = Brooksville (*Hernando*); CK = Cedar Key (*Levy*); CO = Cocoa (*Brevard*); DC = Dade County (*Miami-Dade*); FL = Fort Lauderdale (*Broward*); FM = Fort Myers (*Lee*); GC = Gulf Circle Manatee County (*Manatee*); LA = Lakeland (*Polk*); LP = Lake Placid (*Highlands*); LW = Lake Wales (*Polk*); NP = North Pinellas (*Pinellas*); OR = Orlando (*Orange*); SA = Sarasota (*Sarasota*); SP = St. Petersburg (*Pinellas*); ST = Stuart (*Martin* and *St. Lucie*); TA = Tampa (*Hillsborough*); TT = Ten Thousand Islands (*Collier*); VE = Venice–Englewood (*Charlotte* and *Sarasota*); and WP = West Pasco (formerly New Port Richey; *Pasco*). A zero (“0”) indicates that no Budgerigars were found on a CBC; “cw” denotes one or more Budgerigars were found during count-week but not on count day; and “nc” denotes that no count was published for that season. “CBC season” refers to the ~23-day period (recently standardized as 14 December–5 January) during which CBCs are conducted.

CBC season	# CBCs	# Birds	AB	BC	BD	BK	CK	CODC	FLEMGC	LA	LP	LW	NP	OR	SA	SP	ST	TA	TT	VE	WP	
62–63	1	6	nc	nc	0	nc	nc	0	nc	0	nc	nc	nc	nc	0	6	0	nc	nc	nc	nc	
63–64	1	10	nc	nc	0	nc	nc	0	nc	nc	nc	nc	nc	nc	0	10	0	nc	nc	nc	nc	
64–65	1	100	nc	0	0	nc	nc	0	nc	nc	nc	nc	nc	nc	0	100	0	nc	nc	nc	nc	
65–66	1	11	nc	0	0	nc	nc	0	nc	0	nc	nc	nc	nc	0	11	0	nc	nc	nc	nc	
66–67	2	32	nc	0	12	nc	nc	0	nc	0	nc	nc	nc	nc	0	20	0	nc	nc	nc	nc	
67–68	2	87	nc	0	7	nc	nc	0	nc	0	nc	nc	nc	0	80	0	nc	nc	nc	nc	nc	
68–69	2	56	nc	0	28	nc	nc	0	nc	0	nc	nc	nc	0	28	0	nc	nc	nc	nc	nc	
69–70	2	184	nc	0	34	nc	nc	0	0	0	nc	0	nc	0	150	0	nc	nc	nc	nc	nc	
70–71	3	237	nc	0	175	nc	nc	0	0	0	nc	0	nc	0	50	0	nc	nc	nc	nc	12	
71–72	4	214	nc	0	80	nc	nc	1	0	0	nc	0	nc	0	50	0	0	nc	nc	nc	83	
72–73	4	269	nc	0	152	nc	nc	11	0	0	nc	0	nc	0	90	nc	0	nc	nc	nc	16	
73–74	9	912	nc	0	371	nc	nc	6	0	3	nc	1	nc	0	20	100	nc	0	nc	64	345	
74–75	7	2,910	nc	0	301	nc	nc	3	0	2	0	nc	0	nc	705	1,800	nc	0	nc	18	81	
75–76	7	4,025	nc	0	470	nc	nc	2	1	0	0	nc	0	nc	41	3,000	nc	cw	nc	303	208	
76–77	7	1,254	nc	0	360	nc	nc	0	0	4	0	nc	0	25	84	250	nc	10	nc	521	nc	
77–78	8	6,895	nc	0	nc	nc	nc	0	0	11	0	nc	0	700	1	24	5,400	nc	115	nc	174	470
78–79	6	4,478	nc	0	nc	nc	nc	0	0	0	0	nc	0	740	0	13	3,000	nc	13	nc	14	698

**Table 1.** (Continued) Budgerigars recorded on all published Christmas Bird Counts in Florida, December 1962–January 2015. A total of 22 CBCs in Florida contained at least one Budgerigar report; these CBCs are arranged alphabetically by two-letter code (with counties in italics): AB = Aripeka–Bayport (*Hernando*) and Pasco; all Budgerigars in *Hernando*; BC = Bay County (*Bay*); BD = Bradenton (*Manatee*); BK = Brooksville (*Hernando*); CK = Cedar Key (*Levy*); CO = Cocoa (*Brevard*); DC = Dade County (*Miami-Dade*); FL = Fort Lauderdale (*Broward*); FM = Fort Myers (*Lee*); GC = Gulf Circle Manatee County (*Manatee*); LA = Lakeland (*Polk*); LP = Lake Placid (*Highlands*); LW = Lake Wales (*Polk*); NP = North Pinellas (*Pinellas*); OR = Orlando (*Orange*); SA = Sarasota (*Sarasota*); SP = St. Petersburg (*Pinellas*); ST = Stuart (*Martin* and *St. Lucie*); TA = Tampa (*Hillsborough*); TT = Ten Thousand Islands (*Collier*); VE = Venice–Englewood (*Charlotte* and *Sarasota*); and WP = West Pasco (formerly New Port Richey; *Pasco*). A zero (“0”) indicates that no Budgerigars were found on a CBC; “cw” denotes one or more Budgerigars were found during count-week but not on count day; and “nc” denotes that no count was published for that season. “CBC season” refers to the ~23-day period (recently standardized as 14 December–5 January) during which CBCs are conducted.

CBC season	# CBCs	# Birds	AB	BC	BD	BK	BK	CK	CO	DC	FL	FM	GC	LA	LA	LP	LW	NP	OR	SA	SP	ST	TA	TT	VE	WP
79–80	7	4,878	nc	0	nc	0	3	0	0	0	37	nc	0	nc	0	nc	0	525	0	40	3,800	0	65	nc	0	408
80–81	8	4,632	nc	0	nc	0	0	0	0	4	9	nc	0	nc	0	nc	0	150	0	24	3,100	0	2	nc	2	1,341
81–82	8	1,459	nc	2	nc	0	0	0	1	0	nc	cw	nc	0	nc	0	160	0	104	900	0	16	nc	23	253	
82–83	9	1,006	nc	0	3	0	0	0	0	2	20	0	nc	0	nc	0	100	0	2	750	0	4	nc	28	97	
83–84	11	1,832	nc	0	12	17	0	0	0	5	0	57	0	nc	1	390	nc	36	570	0	40	nc	40	nc	104	600
84–85	9	2,191	nc	0	49	0	0	0	0	2	0	25	0	nc	0	122	nc	121	1,700	0	47	nc	47	nc	23	102
85–86	6	884	nc	0	0	0	0	0	0	0	4	0	nc	0	nc	0	100	nc	0	610	0	1	nc	44	125	
86–87	8	862	nc	0	19	0	0	0	1	0	0	0	nc	0	nc	0	170	nc	3	310	0	6	nc	133	220	
87–88	5	385	nc	0	0	0	0	0	0	0	0	0	0	0	0	3	nc	0	135	0	5	nc	5	nc	52	190
88–89	9	241	nc	0	1	0	0	0	0	5	0	1	0	1	0	4	nc	0	190	0	5	nc	5	nc	16	18
89–90	4	167	nc	0	12	0	0	0	0	0	0	0	0	0	0	12	nc	0	127	0	0	nc	0	nc	0	16
90–91	6	238	nc	1	0	0	0	0	0	4	0	0	0	0	0	16	nc	0	135	0	0	nc	0	nc	22	60
91–92	7	255	39	0	1	0	0	0	0	0	0	0	0	0	0	60	nc	0	100	0	2	nc	2	nc	7	46
92–93	5	329	137	0	0	0	0	0	0	0	0	0	0	0	0	50	nc	0	70	0	0	nc	0	nc	20	52
93–94	4	177	44	0	0	0	0	0	0	0	0	0	0	0	0	60	nc	0	13	0	0	nc	0	nc	0	60
94–95	4	22	8	0	0	0	0	1	0	0	cw	0	0	0	0	0	nc	0	2	0	0	0	nc	0	0	11
95–96	2	90	36	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	nc	0	54
96–97	3	85	29	0	0	0	0	0	0	0	0	0	0	0	0	11	nc	0	0	0	0	0	0	nc	0	45

Table 1. (Continued) Budgerigars recorded on all published Christmas Bird Counts in Florida, December 1962–January 2015. A total of 22 CBCs in Florida contained at least one Budgerigar report; these CBCs are arranged alphabetically by two-letter code (with counties in italics): AB = Aripeka-Bayport (*Hernando* and *Pasco*); all Budgerigars in *Hernando*; BC = Bay County (*Bay*); BD = Bradenton (*Manatee*); BK = Brooksville (*Hernando*); CK = Cedar Key (*Levy*); CO = Cocoa (*Brevard*); DC = Dade County (*Miami-Dade*); FL = Fort Lauderdale (*Broward*); FM = Fort Myers (*Lee*); GC = Gulf Circle Manatee County (*Manatee*); LA = Lakeland (*Polk*); LP = Lake Placid (*Highlands*); LW = Lake Wales (*Polk*); NP = North Pinellas (*Pinellas*); OR = Orlando (*Orange*); SA = Sarasota (*Sarasota*); SP = St. Petersburg (*Pinellas*); ST = Stuart (*Martin* and *St. Lucie*); TA = Tampa (*Hillsborough*); TT = Ten Thousand Islands (*Collier*); VE = Venice-Englewood (*Charlotte* and *Sarasota*); and WP = West Pasco (formerly New Port Richey; *Pasco*). A zero (“0”) indicates that no Budgerigars were found on a CBC; “cw” denotes one or more Budgerigars were found during count-week but not on count day; and “nc” denotes that no count was published for that season. “CBC season” refers to the ~23-day period (recently standardized as 14 December–5 January) during which CBCs are conducted.

CBC season	# CBCs	# Birds	AB	BC	BD	BK	BK	CK	CODC	FL	FM	GC	LA	LA	LP	LW	NP	OR	SA	SP	ST	TA	TT	VE	WP
97–98	2	85	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	nc	0	50
98–99	2	43	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	nc	0	13
99–100	2	92	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	nc	0	53
100–101	3	87	53	0	0	0	0	0	0	0	0	1	0	0	0	0	0	nc	0	0	0	0	0	0	33
101–102	4	92	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	3	1	0	27
102–103	3	116	74	0	0	0	0	0	0	0	2	0	0	0	0	0	0	nc	0	0	0	0	0	0	40
103–104	2	74	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	9
104–105	3	18	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	2	0	0	0	7
105–106	3	45	38	0	0	0	0	0	0	0	1	0	0	0	0	0	0	nc	0	0	0	0	0	0	6
106–107	2	23	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	4
107–108	2	19	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	7
108–109	2	25	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	10
109–110	1	36	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	0
110–111	1	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	0
111–112	2	35	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	5
112–113	2	20	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	0	4
113–114	2	3	1	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	nc	0	0	0	0	0	0	2
114–115	0	0	0	0	0	0	0	0	0	0	0	nc	0	0	0	0	0	nc	0	0	0	0	0	0	0
<b>Total Counts</b>		<b>23</b>	<b>2</b>	<b>18</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>10</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>19</b>	<b>1</b>	<b>13</b>	<b>33</b>	<b>1</b>	<b>15</b>	<b>1</b>	<b>18</b>	<b>41</b>

## METHODS

I used six data sources to determine the status and distribution of Budgerigars in Florida following January 2001: (1) CBC data (National Audubon Society 2015); (2) observations by two residents whose properties supported the last Budgerigars: Leslie Gomillion of Hudson and Shirley Colvard of Hernando Beach; (3) Field Observations Committee seasonal reports published in *Florida Field Naturalist*; (4) personal observations and photographs; (5) data posted to eBird (eBird 2015); and (6) observations at Hernando Beach by Bev and Al Hansen. Photographs and obscure publications related to Budgerigars in Florida have been archived in my personal ornithological collection and are given BPA catalog numbers.

## RESULTS

By January 2001, Budgerigars were restricted to one coastal site in southern Hernando County and three coastal or near-coastal sites in Pasco County (Pranty 2001). Based primarily on CBC data (Table 1), the years of extirpation of Budgerigars elsewhere within their former breeding range were 1997 in Pinellas County, 1993 in Sarasota County, 1992 in Hillsborough County, and 1991 in Manatee County. Despite their small populations, Budgerigars persisted in Hernando and Pasco counties into 2014. These two, final populations are detailed here.

**Hernando County.** Only a few reports of Budgerigars were known in the county through the 1980s, at Bayport, the Brooksville CBC circle, and Spring Hill (Stevenson and Anderson 1994, Pranty 2001, Table 1). None of these individuals persisted and none was known to breed. On the inaugural Aripeka–Bayport CBC in December 1991, a population of dozens of Budgerigars was discovered at Hernando Beach (e.g., Table 1, BP pers. obs.). The highest count of 137 individuals was obtained in December 1992 (Table 1), representing the only triple-digit total of Budgerigars in the county. The population dropped below 50 individuals beginning in 2005. By this time, all nesting activity was thought to be limited to the backyard of Shirley Colvard; this yard contained perhaps 40 wooden nest boxes placed in proximity (e.g., BPA 6036a–g, 1 Apr 2007, B. Pranty; BPA 2147a–c, 5 Jun 2009, B. Pranty). The Hernando Beach flock numbered 30 or more individuals through 2011 (e.g., Table 1, BP pers. obs.), and 25 were observed on 7 January 2012 (B. Hansen pers. comm., eBird data). But after the Colvard home changed ownership later in 2012 and all the nest boxes were removed, the Budgerigar population dwindled quickly, and most remaining individuals represented adult males (BP pers. obs., photos posted to eBird). Only 16 Budgerigars were found on the Aripeka–Bayport CBC in December 2012 (Table 1; BP pers. obs.), and 10 there on 22 February 2013 (D. Gagne, eBird data) represented the final two-digit total. Data posted to eBird indicate seven Budgerigars on 7 April 2013 (G. Sheridan), two remaining to 10 August (M. Burns), and only single

individuals afterward. One male was photographed on the Aripeka–Bayport CBC, 23 December 2013 (Table 1; BP pers. obs.; BPA 8654, T. Leukering) and one female was photographed on 27 Mar 2014 (BPA 8656, A. Whitlock, eBird data). The final sighting at Hernando Beach was one Budgerigar on 24 April 2014 (S. Parrish, eBird data).

**Pasco County.** Budgerigars were formerly abundant in the New Port Richey/Holiday area, with one roost at Holiday containing an estimated 6,000–8,000 individuals in 1978 (Shapiro 1979, Wenner and Hirth 1984). Budgerigars ranged along the entire Pasco County coastline from Hudson southward to the Pinellas County line. All Budgerigars in the county were found within the West Pasco (previously New Port Richey) CBC circle, the results of which were first published in 1971. The population began a severe decline in the mid-1980s, from 600 Budgerigars in December 1983 (Table 1) to fewer than 100 individuals within five years (Table 1). Budgerigars in the New Port Richey/Holiday area were last observed in September 2003 (Pranty 2004), leaving the final remnant population in the Bayonet Point/Hudson area; four individuals at Port Richey on 1 November 2011 (Pranty 2012) may have recently escaped or been released. The Bayonet Point/Hudson population numbered 10 or fewer individuals by January 2004 and yet it persisted for 10 more years (e.g., Table 1). The final Budgerigars in the county frequented the Hudson yard of Leslie Gomillion; one pair successfully produced one fledgling in late 2012 or early 2013 (BPA 6609, 20 Jan 2013, juvenile male, B. Pranty). These three Budgerigars were observed in the Gomillion yard until 15 April 2014; one was found dead the following day and the other two were never seen again (L. Gomillion pers. comm.).

## DISCUSSION

CBC data (Table 1) show that Budgerigar populations increased steadily through the late 1960s and early 1970s, peaked in the late 1970s, and then declined rapidly through the 1980s to extirpation from most areas by the early or mid-1990s. As every CBC circle in Florida that contained Budgerigars showed this trend, the population decline clearly was rangewide and synchronous (Pranty 2001). Although a few Budgerigars nested in cabbage palm (*Sabal palmetto*) axils and natural or artificial cavities (Stevenson and Anderson 1994, Pranty 2001), most bred in specially-built wooden “Budgie boxes” (Pranty 2001) — often several per property — placed in suburban and urban yards. The small entrance cavities of these boxes excluded potential nest competitors such as European Starlings (*Sturnus vulgaris*) but not House Sparrows (*Passer domesticus*), which could readily enter.

Anne Shapiro's (1979:24) study of Budgerigars in the New Port Richey/Holiday area in 1978 showed that "in many instances" House Sparrows entered active Budgerigar nests, destroyed the eggs, and usurped the box. Among other proposed causes (see Pranty 2001), I believe that nest box competition with House Sparrows was the primary cause of the Budgerigar decline; this hypothesis was supported by Shapiro's (1979) study and by observations of residents whose yards supported nesting Budgerigars (Pranty 2001). Additionally, as Budgerigars became locally scarce, fewer residents provided nest boxes — or they failed to discourage House Sparrows from using the boxes — which caused the Budgerigar population to decline further until all local individuals died out. This process apparently was repeated in dozens of areas until extirpation reached the county — and eventually state — levels. It is therefore not surprising that the two final, remnant flocks were supported by residents who provided nest boxes or well-stocked bird feeders.

In recent years, as the number of Budgerigars declined to a handful of individuals and their range became reduced to two residential neighborhoods, birders spent a great deal of time and effort searching for the remaining birds. Except possibly during summer, the Hernando Beach neighborhood probably received visits from birders every month for the past 10 or more years. Many of these birders posted their sightings to birding listservers or to eBird, assuring their dissemination. Additionally, both Hudson and Hernando Beach are within CBC circles that I compile, adding to the effort to census the remaining Budgerigars. Finally, a local resident whose property supported the final individuals in Pasco County continues to maintain several bird feeders and has reported no Budgerigars since April 2014 (L. Gomillion pers. comm.). As a result of all this observer effort, I am confident that the disappearance of Budgerigars from Hernando Beach, Hernando County and from Hudson, Pasco County reflects the genuine loss of the final individuals. Thus, the species is now extirpated from Florida as a formerly abundant breeder; local escapees and releases will undoubtedly continue to be reported statewide from time to time. Coincidentally, the last Budgerigars from the final two flocks disappeared within nine days of each other during the second half of April 2014.

As the Budgerigars in west-central Florida represented the only large, breeding population found outside their native range, their extirpation represents the loss of a regularly-occurring species in the Western Hemisphere. The history of Budgerigars in Florida proves well that even large and robust populations of exotic birds can disappear decades after their founding. As Greenlaw et al. (2014:146) wrote, "In hindsight, Budgerigars probably never were firmly established,



being over-dependent on human support (feeding stations and nest boxes), and initially promoted by enthusiastic releases that inevitably diminished with time.”

## ACKNOWLEDGMENTS

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