

LONGEVITY RECORDS OF NORTH AMERICAN BIRDS

BY JOHN H. KENNARD

In 1968, I was amazed to trap a Black-capped Chickadee (*Parus atricapillus*) I had banded more than 12 years previously. I tried to find in the literature longevity records for wild North American birds, and found this to be exceedingly difficult.

Geoffrey Gill published a list in *EBBA News* (8(10):2, 1945), and this was followed by a "final list" in 1946 (9(3):3-4). In 1963 *EBBA News* (26:224-225) F. P. Frazier summarized 36 species previously published in *The Ring*, and Charles H. Blake estimated the extreme age of birds by families (26:223-224). Dr. Rydzewski, editor of *The Ring*, published a list of longevity records of birds of the world (*Ring*, 33:147-152, 1962), followed in 1963 (34:177-181) by a list of North American records. Recently in 1973, but not distributed until mid-1974, Dr. Rydzewski published in *The Ring* (77:91-96) his latest list on longevity of North American birds. These have been included with additional data when it could be obtained.

Bird-Banding, *EBBA News*, *Inland Bird-Banding News*, *Western Bird Bander*, *Auk*, and *Wilson Bulletin*, which occasionally publish such records, were searched for the last 20 years. Countless other publications occasionally carry reports of records, so some must have been missed.

In the spring of 1972 I published requests for additional data in *Bird-Banding* and *EBBA News*, and later in *Inland Bird-Banding News*, *Western Bird Bander*, and *Ontario Bird Banding Newsletter*. We made a preliminary report at the November 1972 meeting of NEBA, and asked for further data.

In February, 1973 Harvey Farber, co-editor, published in *EBBA News* (36:26) "Who Sez I am not Old Enough," an article listing 100 species. He used the same 1945 and 1946 EBBA lists, adding data from members of EBBA, the most important of which were the records of Powdermill Nature Reserve, furnished by Dr. Mary Clench, and requested that anyone who could beat these records send data to him. Following correspondence, because of my prior request for the similar data in the same publication, Mr. Farber graciously offered full cooperation, and forwarded to me all data received as a result of his article.

The late E. Alexander Bergstrom responded with enthusiasm, and sent me an extensive unpublished file on the subject that he had been working on since the early 1950's, and many others contributed additional records.

The staff of the Bird Banding Laboratory has been most cooperative and helpful. They furnished valuable data on shore birds to Mr. LeRoy Wilcox, who forwarded a summary to me, and they furnished me with data on raptors and many other species. We had hoped that the computer could give us more complete data on game birds, but this had not yet been possible. My list is obviously inadequate in this area.

I hope to include more complete data on game birds, as well as the corrections and additions that I feel sure will be pointed out to me after publication of this list, in a later supplementary list.

The following table is a summary of my compiled data on longevity in wild North American birds. The species are listed in order according to the 1957 edition of the AOU *Check-list*.

I have included, wherever possible, the following data: band number, date, age, sex, who and where banded; date, how, who and where of last recovery; reference and estimated minimal age (EMA). I have used codes according to the Bird Banding Manual, and abbreviations as listed below:

Dates are according to BBM code: Month, Day, Year; x = unknown.

Age: HY = Hatching Year, SY = Second Year, AHY = After Hatching Year, ASY = After Second Year, A4Y = After Fourth Year, etc.

Sex: M = Male, F = Female, U = Unknown

How Recovered:

00 = Found Dead	26 = Caught in fishing gear
01 = Shot	29 = Sight record-color band
01* = Killed by man	33 = Caught in nest
03 = Caught due to injury	45 = Dead on highway
04 = Caught in trap	52 = Band read by telescope
09 = Caught by hawk or owl	54 = Struck radio or TV tower
13 = Struck stationary object	89 = Trapped and released (different 10-min block)
14 = Struck motor vehicle	98 = Band No. only—no information
15 = Caught due to weather	99 = Trapped and released (same 10-min block)
16 = Collected as scientific specimen	99* = Trapped and released (place not specified)
20 = Caught due to disease	

References:

Auk	= <i>Auk</i>
BB	= <i>Bird-Banding</i>
BBL	= Bird Banding Laboratory
EBBA	= <i>EBBA News</i>
IBB	= <i>IBBA News</i>
WBB	= <i>Western Bird Bander</i>
PC	= Personal communication to
	AB = E. Alexander Bergstrom
	HF = Howard Farber
	JK = John H. Kennard
	LW = LeRoy Wilcox

EMA: I have arbitrarily chosen to give all birds a hatching date in June, except those banded as hatching year birds before that month. I realize that this is not entirely accurate, but feel it will give a more valid comparison than to consider a bird one year old

on 1 January. Thus a bird banded in one year, and recovered over 10 years later in February, would be considered to be 10 years and eight months old, whether banded as a nestling in June, or as a juvenile in December, and EMA recorded as 10-08.

Because even hummingbirds apparently have a life span of at least five years, I have not included records of birds less than four years old.

A complete list of acknowledgments is obviously not practical at this time because it would have to include all those whose records are marked "PC" for personal communication on the list, plus the many others whose records have been sent to me but did not qualify for the list.

Special thanks are due to the late E. Alexander Bergstrom, without whose help the project would never have got off the ground; to Fred Schaeffer and Harvey Farber of *EBBA News* for their cooperation, and their files on the subject; to the editors of the regional publications; to Dr. Mary Clench, of Carnegie Museum for the files from Powdermill and other helpful suggestions and criticisms; to the staff of Manomet Bird Observatory for their cooperation; to LeRoy Wilcox for his file on shorebirds; to Deborah Howard, Charles Blake, and other officers of NEBBA for their support; to Dr. W. Ryzewski, editor of *The Ring* for copies of his data; to George Jonkel and his staff at the Bird Banding Laboratory for their help, and especially to Chandler S. Robbins for editing, criticism, and help in preparing this paper; to our editor Dr. David W. Johnston; and lastly to my wife for her patience, help and encouragement.

The list itself is perhaps incomplete and will rapidly become obsolete. Therefore, anyone able to furnish corrections or additions should please send complete data to me.

Box 150 - Rt 5, Bedford, New Hampshire 03102. Received 8 December 1973, accepted 16 December 1974.

Common Loon										
<i>Gavia immer</i>										
Black-footed Albatross	44-711603 02-27-63	09-05-45 (99*)	AHY-U							7-10
<i>Diomedea nigripes</i>										
Laysan Albatross	38-714328 11-30-72	11-24-38 (99)	A6Y-U (Breeding when banded)							18-08
<i>Diomedea immutabilis</i>										
Leach's Petrel	53-155960 06-23-73	07-30-53 (33)	A4Y-U same							40-09
<i>Oceanodroma leucorhoa</i>										
Red-tailed Tropicbird	525-23954 06-25-63	11-16-54 (98)	AHY-U							24-
<i>Phaethon rubricauda</i>										
White Pelican	498-77287 07-28-68	06-29-52 (01)	HY-U Minn.							9-00
<i>Pelecanus erythrorhynchos</i>										
Brown Pelican	27-29025 11-15-64	09-20-33 (98)	HY-U							16-01
<i>Pelecanus occidentalis</i>										
Blue-faced Booby	498-77287 03-01-65	06-14-47 (98)	HY-U							31-05
<i>Sula dactylatra</i>										
Red-footed Booby	44-725087 03-01-65	06-14-47 (98)	HY-U							17-09
<i>Sula sula</i>										
Gannet										17-09
<i>Morus bassanus</i>										
Double-crested Cormorant	418-07815 82-xx-64	07-14-41 (26)	HY-U							16-09
<i>Phalacrocorax auritus</i>										
Anhinga	34-658599 02-15-45	06-15-35 (00)	U-U Vera Cruz, Mex.							23-
<i>Anhinga anhinga</i>										
Great Blue Heron										9-08
<i>Ardea herodias</i>										20-
Little Blue Heron	36-640882 93-xx-43	05-25-36 (00)	U-U Columbia							7-04
<i>Florida caerulea</i>										
Reddish Egret	B611848 09-12-42	06-12-31 (00)	HY-U							12-03
<i>Dichromanassa rufescens</i>										

EBBA 9:3, 1946

Ring 77:91, 1973

W. A. Wright, Midway Is, HI
(Breeding when banded)

BBL

C. E. Huntington, Kent Is, Me.
PC-JK

Ring 77:91, 1973

L. Strait, Arrowwood Nat. Wildl. Ref., N.D.
PC-JK

R. J. Longstreet, Brevard, Fla.

PC-JK

Ring 77:91, 1973

Ring 77:91, 1973

EBBA 36:27, 1973

E. M. Cadbury, Muscongus, Me.
PC-JK

B. B. Coffey, Miss.

BB 19:3, 1948

Auk 76:464, 1959

D. F. Owen

R. L. Caylor, Miss.

BB 19:3, 1948

Ring 77:92, 1973

Great Egret <i>Casmerodius albus</i>	346-03502 04-25-70	06-29-47 (01)	HY-U Ottawa Co., Ohio	L. F. VanCamp, Ottowa, Co., Ohio PC-JK	22-10
Louisiana Heron <i>Hydranassa tricolor</i>	ABBA37537 01-xx-37	08-13-20 (98)	HY-U	Ring 77:92, 1973	10-07
Black-crowned Night Heron <i>Nycticorax nycticorax</i>	496-4087 07-09-73	06-06-52 (16)	HY-U	L. F. VanCamp, Ottowa Co., Ohio R. D. Hoffman, Lucas Co., Ohio PC-JK	21-01
Glossy Ibis <i>Plegadis falcinellus</i>	726-82628 06-31-71	07-10-66 (89)	HY-U	J. C. Miller, Absecon, N.J. E. Fried, Seneca Co., N.Y. PC-HF-JK	5-00
Trumpeter Swan <i>Olor buccinator</i>	509-55087 07-xx-70	07-24-56 (99)	U-U	R. A. Ryder, Red Rock Lake, Mont. WBB 47:12, 1972	24-01
Canada Goose <i>Branta canadensis</i>	32FMark5:36 11-10-55	'Fall '32'	C. H. Douville, Highbanks, Mich.	J. Miner, Ont. Auk 74:510, 1957	23-05
Blue Goose <i>Chen caerulescens</i>	34-702516 12-17-42	12-02-34 (01*)	U-U	Ring 77:92, 1973	8-06
Snow Goose <i>Chen cerulescens</i>	597-27576 11-25-72	11-05-56 (01)	AHY-F Willows, Cal.	Tule Lake, Cal. WBB 49(3):15, 1974	17-05
Mallard <i>Anas platyrhynchos</i>	B668941 07-09-61	07-07-32 (00)	HY-U	W. Albert, Jr., Lansing, Iowa BBL	29-01
Black Duck <i>Anas rubripes</i>	38-637171 01-19-57	04-01-38 (03)	AHY-U Norfolk, Va.	J. H. Buckalew, Leipsic, Del. PC-HF	19-07
Gadwall <i>Anas strepera</i>	586-60640 11-20-68	08-16-57 (99)	U-U	Stillwater Wildl. Manage. Area, Nev. WBB 45:46, 1971	11-05
Pintail <i>Anas acuta</i>	41-605622 12-09-66	11-28-40 (01)	U-M No. Princeton, Cal.	G. C. Ehman, Oakland, Cal. BBL	26-06
American Green-winged Teal <i>Anas crecca carolinensis</i>	101495 02-02-30	03-04-22 (01*)	AHY-U	Ring 77:92, 1973	9-07
American Widgeon <i>Anas americana</i>	A58253 10-xx-41	04-04-33 (01*)	AHY-U	Ring 77:92, 1973	9-04
Shoveler <i>Anas clypeata</i>	46-00578 01-xx-69	10-08-52 (99)	U-U	Stillwater WMA, Nev. WBB 45:46, 1971	16-07

Ring-necked Duck <i>Aythya collaris</i>	C600331 11-19-42	01-15-33 (01*)	AHY-U	Ring 77:92, 1973	10-05
Canvasback <i>Aythya valisineria</i>	637-63313 02-28-73	01-12-59 (11)	AHY-M Sinaloa, Mexico	WBB 49(3):15, 1974	14-08
Greater Scaup <i>Aythya marila</i>	12-27-70	01-18-62 (01)	AHY-U Willard, N.Y.	Migrant, 43:72, 1972	10-06
Lesser Scaup <i>Aythya affinis</i>	B630208 12-14-40	12-07-31 (89)	U-U	Ring 77:92, 1973	9-06
Common Eider <i>Somateria mollissima</i>	40-807898 08-22-50	06-26-40 (98)	U-U	Ring 77:92, 1973	12-02
Black Vulture <i>Coragyps atratus</i>	41-801846 12-xx-56	01-01-41 (04)	U-U Lutcher, La.	BBL	16-06
Goshawk <i>Accipiter gentilis</i>	38-713532 10-30-48	06-08-42 (01)Ms	HY-U C. L. Broley, Delta, Ont.	PC-JK	6-04
Sharp-shinned Hawk <i>Accipiter striatus</i>	553-03900 10-14-66	10-16-54 (00)	U-U D. D. Berger, Cedar Gr., Wisc.	PC-JK	12-04
Cooper's Hawk <i>Accipiter cooperii</i>	49-641435 11-06-53	06-13-46 (01)	HY-U F. C. Laskey	BBL	7-05
Red-tailed Hawk <i>Buteo jamaicensis</i>	34-541345 03-08-63	02-25-44 (99)	U-U R. Carter	EBBA 36:27, 1973	13-07
Red-shouldered Hawk <i>Buteo lineatus</i>	A573145 12-20-43	07-15-36 (01)	AHY-M? U-U	BBL	19-08
Broad-winged Hawk <i>Buteo platypterus</i>	36-638810 01-10-52	07-26-42 (01)	U-U J. P. Kennedy, Winnipeg, Man.	BBL	7-06
Swainson's Hawk <i>Buteo swainsoni</i>	36-7047695 03-01-42	01-15-36 (01)	HY-U Buena Aires, Argentina	PC-JK	9-07
Rough-legged Hawk <i>Buteo lagopus</i>	572-00402 08-06-72	03-01-42 (20)	U-U Great Bend, Kans.	BB 21:14, 1950	6-09
Ferruginous Hawk <i>Buteo regalis</i>			HY-U Same	WBB 48:48, 1973	17-03

Golden Eagle	202902	05-08-27	U-U	W. M. Pierce	BBL	10-05
<i>Aquila chrysaetos</i>	10-10-37	(01)	Guanajuato, Mexico			
Marsh Hawk	A639503	07-03-38	U-U	F. G. Bard, Imperial Beach, Sask.	BB 21:15, 1950	16-05
<i>Circus cyaneus</i>	12-06-44	(04)	Scotland, Tex.			
Osprey	27-19079	04-26-34	AHY-U	J. H. Buckalew, N. Cedar Br., Del.	PC-JK	32-00
<i>Pandion haliaeetus</i>	06-74-65	(98)	W. K. Cook, Herring Cr. Del.			
Peregrine Falcon	34-632357	10-08-39	U-U	R. L. Meredith, Assateague, Md.	BB 21:15, 1950	5-05
<i>Falco peregrinus</i>	11-05-44	(01)	"N. Bolivia"			
Chachalaca	565-57741	10-02-64	AHY-M	R. J. Fleetwood, Santa Ana NWR, Tex.	PC-JK	8-10
<i>Ortalis vetula</i>	04-08-72	(29)	W. P. Marion, Same			
Ruffed Grouse	A18	08-16-65	HY-U	R. J. Stoll, Vinton Co., Ohio	BB 45:270-1, 1974	7-07
<i>Bonasa umbellus</i>	01-04-73	(01)	Vinton Co., Ohio			
Bobwhite	11-29-58	02-04-54	ASY-M	H. M. Marden, Boone Co., Mo.	Auk 78:94, 1961	6-05
<i>Cotinus virginianus</i>	A444872	11-11-40	AHY-M	E. L. Summer, Berkeley, Cal.	BB 21:15, 1950	4-09
California Quail	03-03-45	(00)	U-U			
<i>Lophortyx californicus</i>	36-412088	10-12-36	HY-U	W. V. Dept. Nat. Res.	Ring 77:92, 1973	6-05
Gambel's Quail	11-24-42	(99*)	J. Rieffenberger		PC-HF	12-06
<i>Lophortyx gambelii</i>						
Turkey	12-xx-72	11-24-60	AHY-M	Bitter Lake NWR, N.M.	WBB	6-01
<i>Meleagris gallopavo</i>	558-30568	(00)	Mayno Poligano, USSR			
Sandhill Crane	07-12-68	05-17-33	AHY-U		Ring 77:92, 1973	6-03
<i>Grus canadensis</i>	A511251	(99*)	AHY-U			
Common Gallinule	09-24-38	01-08-32	AHY-U		Ring 77:92, 1973	9-06
<i>Gallinula chloropus</i>	B632407	(00)				
American Coot	12-29-40	06-15-62	HY-U	L. Wilcox, E. Moriches, N.Y.	PC-JK	10-0
<i>Fulica americana</i>	575-25603	(89)	E. Quoogue, N.Y.			
American Oystercatcher	06-12-72	06-09-50	AHY-U	L. Wilcox, E. Moriches, N.Y.	PC-JK	14-00
<i>Haematopus palliatus</i>	44-103528	(99)				
Piping Plover	06-06-63					
<i>Charadrius melodus</i>						

Killdeer <i>Charadrius vociferus</i>	38-364988 12-00-45	05-05-40 (00)	AHY-F	P. D. Hurd, Costa Mesa, Cal.	BBL	6-06
American Woodcock <i>Ptiloheta minor</i>	41-304358 12-07-48	02-04-41 (45)	AHY-U	R. T. Norris, Grosse Tete, La. Rocky Mount, N.C.	BBL	8-06
Common Snipe <i>Capella gallinago</i>	48-302403 10-16-53	08-31-48 (01)	AHY-U	K. E. Bartel, Calumet L, Ill. M. Shabi, Whiting, Ind.	PC-JK	6-04
Upland Plover <i>Bartramia longicauda</i>	37-309981 08-29-46	05-22-42 (03)	AHY-U	G. Rogers, Jefferson Co., Wise, Macon, Mich.	BBL	5-02
Spotted Sandpiper <i>Actitis macularia</i>	39-150094 11-08-46	10-24-39 (99)	AHY-U	I. R. L. Rogers, Modesto, Cal.	BBL	8-05
Lesser Yellowlegs <i>Tringa flavipes</i>	05-01-65	08-24-60 (00)	AHY-U	R. P. firench, Trinidad Plankinton, S.D.	PC-JK	5-11
Knot <i>Calidris canutus</i>	502-75260 08-22-61	07-09-55 (89)	HY-U	D. F. Parmalee, Ellesmere Is, NWT St Kilda Is, Scotland	BBL	6-02
White-rumped Sandpiper <i>Calidris fuscicollis</i>	72-158158 06-01-71	06-02-67 (14)	AHY-U	E. F. Martinex, Gt. Bend, Kans.	BBL	5-00
Least Sandpiper <i>Calidris minutilla</i>	29-16947 08-03-71	10-28-64 (89)	U-U	D. F. Parmalee, Gt. Bend, Kans. Gt. Bend	BBL	7-02
Dunlin <i>Calidris alpina</i>	36-229093 04-02-41	10-14-36 (16)	U-U	O. L. Austin, Jr., N. Eastham, Mass. Hog Is, Va.	BBL	4-10
Semipalmated Sandpiper <i>Calidris pusillus</i>	525-42993 xx-xx-68	8-09-64 (99)	AHY-U	B. B. Knorr, S. Amboy, N.J.	PC-JK	7-02
American Avocet <i>Recurvirostra americana</i>	48-732xx4 07-xx-72	07-05-58 (00)	HY-U	J. W. Hopkins, Hussar, Alta. Purple Spring, Alta.	BBL	9-07
Glaucous-winged Gull <i>Larus glaucescens</i>	637-60625 09-11-69	07-xx-49 (52)	Protection Is,	Z. M. Schultz, San Juan Is., Wash. Wash.	WBB 48:4, 1973	22-01
Great Black-backed Gull <i>Larus marinus</i>	34-657357 06-01-51	07-17-59 (89)	HY-U	L. Wilcox, Gardner's Is., N.Y. Watch Hill, R.I.	PC-JK	10-03
Western Gull <i>Larus occidentalis</i>		07-10-35 (98)	U-U		Ring 77:93, 1973	16-00

Herring Gull <i>Larus argentatus</i>	3607326 08-xx-62	07-12-31 (98)	HY-U	Ring 77:93, 1973	31-02
California Gull <i>Larus californicus</i>	A57244 08-16-44	06-30-33 (?)	AHY-U	Ring 77:93, 1973	12-02
Ring-billed Gull <i>Larus delawarensis</i>	A679718 06-12-51	12-10-30 (00)	HY-U Cedar River, Mich.	W. I. Lyon, Naubinway, Mich. BBL	21-
Laughing Gull <i>Larus atricilla</i>	635-88507 12-20-70	07-16-66 (00)	HY-U	J. C. Miller, Stone Hbr., N.J.	5-06
Franklin's Gull <i>Larus pipizcan</i>	A435450 06-20-37	06-11-32 (01)	HY-U	S. Barnwell, Jacksonville, Fla.	5-0
Common Tern <i>Sterna hirundo</i>	xx-xx-52	xx-xx-29 (09)	ASY-U	O. L. Austin	25-
Arctic Tern <i>Sterna paradisaea</i>	35-325864 06-19-70	07-24-36 (99)	HY-U	A. Davis, Green Is., Me.	34-
Roseate Tern <i>Sterna dougallii</i>	683-41774 06-16-69	07-16-60 (99)	HY-U	L. Wilcox, Gull Is., N.Y.	9-00
Sooty Tern <i>Sterna fuscata</i>	40-350148 06-07-72	06-xx-40 (99)	HY-U	W. B. Robertson, Bush Key, Fla.	32-01
Least Tern <i>Sterna albifrons</i>	518547 07-09-50	07-15-29 (98)	U-U Cotuit, Mass.	O. L. Austin, Cotuit, Mass.	21-01
"Cal." Least Tern <i>Sterna albifrons brownii</i>	040166014 06-06-56	06-15-41 (20)	HY-U (B. W. Massey)	F. G. Crawford, Sunset Beach, Cal. PC-JK	15-0
Caspian Tern <i>Hydroprogne caspia</i>	378622 08-09-51	06-19-25 (01)	HY-U Bass Is., Ohio	F. C. Lincoln, St. James, Mich. BB 23:72, 1952	26-02
Noddy Tern <i>Anous stolidus</i>	723-88466 01-08-72	07-05-64 (00)	AHY-U Same	C. T. Collins, Trinidad	7-07
Black Skimmer <i>Rynchops nigra</i>	38-417182 06-20-60	07-10-48 (89)	HY-U	L. Wilcox, E. Moriches, N.Y.	12-0
Band-tailed Pigeon <i>Columba fasciata</i>	525-50832 06-30-70	09-23-65 (89)	AHY-M M. Snyder, Evergreen, Colo.	R. A. Ryder, Sedalia, Colo. WBB 47:12, 1972	6-0

White-winged Dove <i>Zenaidura macroura</i>	40-119114 09-16-45	07-31-40 (01)	U-U Sebastian, Tex.	G. B. Suanders, Mission, Tex. BB 21:16, 1950	5-03
Mourning Dove <i>Zenaidura macroura</i>	653-72938 08-xx-72	09-16-62 (00)	HX-U Lakehurst, N.J.	W. Pepper, Island Beach, N. J. PC-HF	10-02
Ground Dove <i>Columbina passerina</i>	3933797 06-06-37	03-25-38 (99*)	AHY-U	Ring 77:93, 1973	6-0
Inca Dove <i>Scardafella inca</i>	39-208321 04-11-43	03-25-38 (99*)	AHY-U	Ring 77:93, 1973	5-10
Barn Owl <i>Tyto alba</i>	10-28-46	04-24-35 (20)	U-U	F. N. Gallup, Escondido, Cal. BB 20:150, 1959	11-06
Great Horned Owl <i>Bubo virginianus</i>	200713 11-23-39	04-17-27 (01)	U-U	E. A. Stoner, Benica, Cal. EBBA Jan., 1949	12-08
Snowy Owl <i>Nyctea scandiaca</i>	11-xx-69	07-18-60 (89)	HY-U	D. F. Parmalee, Victoria Is. NWT, Can. PC-LW & JK	9-05
Burrowing Owl <i>Speotyto cunicularia</i>	A575106 02-17-40	06-07-32 (98)	AHY-U	Ring 77:93, 1973	8-08
Barred Owl <i>Strix varia</i>	A708824 02-03-40	05-07-32 (98)	AHY-U	Ring 77:93, 1973	8-08
Whip-poor-will <i>Caprimulgus vociferus</i>	693-54008 05-15-65	05-15-62 (99)	AHY-M	M. H. Clench, Powdermill, Pa. PC-JK	3-11
Chimney Swift <i>Chaetura pelagica</i>	24-167605 06-25-70	09-16-57 (99*)	AHY-	Ring 77:93, 1973	14-00
Ruby-throated Hummingbird <i>Archilochus colubris</i>	x7278 06-14-69	08-23-64 (99*)	AHY-U	Ring 77:94, 1973	5-02
Yellow-shafted Flicker <i>Colaptes auratus</i> subsp.				M. Magee EBBA 36:27, 1973	12-05
Red-shafted Flicker <i>Colaptes auratus</i> subsp.	543-82051 01-07-71	05-16-65 (99)	AHY-M	Thorne Ecol. Inst., Colo. WBB 47:56, 1972	5-07
Pileated Woodpecker <i>Dryocopus pileatus</i>	05-xx-48	07-06-38 (01)		H. Pegg, Glenevis, Alta. BB 22:125, 1951	9-11

Red-bellied Woodpecker <i>Centurus carolinus</i>	512-45224 02-22-67	09-30-46 (99)	U-M	C. H. Blake, Hillsboro, N.C.	PC-JK	20-08
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i>	462748 05-21-35	06-23-26 (00)	U-U	Ring 77:94, 1973		8-11
Yellow-bellied Sapsucker <i>Sphyrapicus varius</i>	69-194 517 02-04-73	11-15-66 (99)	U-M	E. P. Teulings, Chapel Hill, N.C.	PC-HF & JK	6-08
Hairy Woodpecker <i>Dendrocopos villosus</i>	410-0745 04-26-74	05-20-61 (99)	U-U	R. McCullough, Stillwater, N.J.	PC-JK	12-10
Downy Woodpecker <i>Dendrocopos pubescens</i>	29-115183 11-50-71	12-20-61 (99)	U-F	J. C. Olyphant, St. Paul, Minn.	PC-JK	10-05
Eastern Kingbird <i>Tyrannus tyrannus</i>	05-24-42	07-10-36 (99)	AHY-U	H. Gray, Wilton, N.D.	BB 19:160, 1948	6-11
Western Kingbird <i>Tyrannus verticalis</i>	35-139818 05-20-41	05-26-35 (01*)	AHY-U			6-11
Great Crested Flycatcher <i>Myiarchus crinitus</i>	29-115025 06-07-71	07-14-61 (99)	AHY-U	J. C. Olyphant, St. Paul, Minn.	Ring 77:94, 1973 PC-JK	11-
Eastern Phoebe <i>Sayornis phoebe</i>	469017 07-05-35	07-02-27 (98)	U-U			8-01
Traill's Flycatcher <i>Empidonax traillii</i>	113-63573 07-29-69	06-16-66 (99)	AHY-U	L. S. Ryan, Little Falls, Minn.	PC-HF	4-01
Eastern Wood Pewee <i>Contopus virens</i>	108-76053 05-23-70	07-11-64 (99)	AHY-U	Powdermill NR, Rector, Pa.	PC-JK	6-11
Tree Swallow <i>Iridoprocne bicolor</i>				L. B. Chapman, Princetown, Mass.	EBBA 9:4, 1946	9-0
Bank Swallow <i>Riparia riparia</i>				C. D. Stoner, Fish Creek, N.Y.	EBBA 9:4, 1946	6-11
Barn Swallow <i>Hirundo rustica</i>	63-15554 09-26-68	08-28-60 (89)	U-U 'Vermont'	D. L. Bordner, State Col., Pa.	PC-JK	8-03
Cliff Swallow <i>Petrochelidon pyrrhonita</i>	41-97901 07-03-45	07-11-41 (99)	U-U	R. B. Fischer, Livingston Manor, N.Y.	PC-AB	4-01

Purple Martin <i>Progne subis</i>	B261331 03-xx-47	07-01-33	HY-U	L. E. Hunter, Dallas City, Ill.	BBL	4-1
Gray Jay <i>Perisoreus canadensis</i>	436659 08-11-36	09-23-27 (00)	U-U		Ring 77:96, 1973	9-02
Blue Jay <i>Cyanocitta cristata</i>	543-54804 12-16-71	07-24-57 (99)	HY-U	R. J. Middleton, Norristown, Pa.	BB 45:208, 1974	14-06
Steller's Jay <i>Cyanocitta stelleri</i>	34-359299 06-xx-44	06-29-38 (99)	U-U	M. E. Beatty, Yosemite, Cal.	BB 21:17, 1950	6-0
Scrub Jay <i>Aphelocoma coerulescens</i>	07-07-70	05-14-60 (99)	AHY-F	G. E. Woolfenden, Tampa, Fla.	PC-JK	11-01
Mexican Jay <i>Aphelocoma ultramarina</i>	743-83922 12-10-69	12-01-65 (99)	U-U	L. Wilcox, Madera, Ariz.	PC-JK	4-06
Green Jay <i>Cyanocorax yncas</i>	703-31015 03-21-72	01-19-63 (99)	AHY-U W. R. Marion	R. J. Fleetwood, Santa Anna, NWR, Tex.	PC-JK	9-09
White-necked Raven <i>Corvus cryptoleucus</i>	B647232 03-05-38	06-12-32 (98)	HY-U		Ring 77:96, 1973	5-08
Common Crow <i>Corvus brachyrhynchos</i>				A. Holm	EBBA 36:28, 1973	14-01
Fish Crow <i>Corvus ossifragus</i>	38-634512 08-23-45	04-30-38 (00)	U-U Little Rock, Ark.	E. A. McIlhenny, Avery Is., La.	BB 21:17, 1950	8-02
Clark's Nutcracker <i>Nucifraga columbiana</i>	503-86500 11-13-69	08-04-52	U-U	R. M. Brown, Crater Lake, Cal.	WBB 45:46, 1971	17-05
Black-capped Chickadee <i>Parus atricapillus</i>	25-62121 11-09-68	10-12-56 (99)	U-U	J. H. Kennard, Bedford, N.H.		12-05
Carolina Chickadee <i>Parus carolinensis</i>	22-53814 05-26-67	04-14-57 (99)	AHY-U	W. H. Jenkins, Elmer, N.J.	PC-JK	10-11
Mountain Chickadee <i>Parus gambeli</i>	C97908 03-03-38	12-28-30 (99*)	U-U		Ring 77:94—1973	7-09
Tufted Titmouse <i>Parus bicolor</i>	42-137944 "Nestled 1950"	01-27-39	AHY-U Same	R. Middleton, Norristown, Pa.	EBBA 32:225, 1969	12-

White-breasted Nuthatch <i>Sitta carolinensis</i>	63-68470 03-31-71	U-U	A. Colister, Longmont, Colo.	WBB 46:54, 1971	9-09
Red-breasted Nuthatch <i>Sitta canadensis</i>	01-84069 12-13-68	AHY-M	R. Patterson, Mt. Desert, Me.	PC-HF & JK	7-06
Brown-headed Nuthatch <i>Sitta pusilla</i>	113-61608 11-12-71	HY-U	E. P. Teulings, Chapel Hill, N.C.	PC-HF & JK	4-05
Pygmy Nuthatch <i>Sitta pygmaea</i>	67-26804 02-29-69	U-U	A. C. Felt, Idyllwild, Cal.	WBB 45:46, 1971	7-03
Brown Creeper <i>Certhia familiaris</i>	104-23304 10-19-65	AHY-U	K. S. Anderson, Raynham, Mass.	PC-JK & EBBA 29:236, 1966	4-04
Wrentit <i>Chamaea fasciata</i>	37-7517 08-03-44	U-U		Ring 77:95, 1973	6-02
House Wren <i>Troglodytes aedon</i>	108-44450 08-03-71	AHY-U		Ring 77:94, 1973	7-02
Carolina Wren <i>Thryothorus ludovicianus</i>	H73200 04-19-39	U-U	A. R. Laskey, Nashville, Tenn.	PC-JK & EBBA 36:28, 1973	4-10
Mockingbird <i>Mimus polyglottos</i>	36-21596 05-15-45	U-U	A. R. Laskey, Nashville, Tenn.	PC-JK & EBBA 36:28, 1973	8-11
Gray Catbird <i>Dumetella carolinensis</i>	461076 04-24-38	AHY-U	F. Labahn, Blue Is., Ill.	EBBA 9:4, 1946	9-03
Brown Thrasher <i>Toxostoma rufum</i>	34-302899 01-04-52	U-U		Ring 77:94, 1973	12-10
American Robin <i>Turdus migratorius</i>	62-115684 04-27-70	AHY-U	R. Cregar, Radnor, Pa.	Ring 77:94, 1973	11-08
Wood Thrush <i>Hylocichla ustelina</i>	03-25-34	U-U	B. Karlrut, Phila., Pa.	PC-HF & JK	8-10
Hermits Thrush <i>Catharus guttatus</i>	101-145049 05-15-72	HY-U	W. Pepper, Phila., Pa.	EBBA 36:28, 1973	5-09
Veery <i>Catharus fuscescens</i>		(13)	D. Bordner, Island Beach, N.J.	PC-JK	9-11

Eastern Bluebird <i>Sialia sialis</i>				R. J. Fleetwood, Round Oak, Ga. EBBA 9:4, 1946	6-06
Cedar Waxwing <i>Bombycilla cedrorum</i>	106-10225 01-28-72	11-06-66 (00)	HY-U	Powdermill NR, Rector, Pa.	5-07
Loggerhead Shrike <i>Lanius ludovicianus</i>	A279800 07-xx-36	04-23-31 (01*)	AHY-U	W. R. Hardes, Greenville, N.C.	6-01
Starling <i>Sturnus vulgaris</i>		11-22-61 (99)	U-U	L. Wilcox, Islip, N.Y.	11-09
White-eyed Vireo <i>Vireo griseus</i>	75-60731 03-11-72	10-19-67 (99)	AHY-U	Ms. B. Fisk, Homestead, Fla.	5-09
Yellow-throated Vireo <i>Vireo flavifrons</i>	88-59624 05-15-73	06-01-68 (99)	AHY-U	P. Dring, Willow Spring, Ill.	5-11
Red-eyed Vireo <i>Vireo olivaceus</i>	69-42199 06-09-72	06-07-63 (99)	AHY-U	Powdermill NR, Radnor, Pa.	10-
Warbling Vireo <i>Vireo gilvus</i>	110-70415 04-22-70	06-16-66 (99)	U-U	R. A. Ryder, Point Reyes Bird Obs., Cal.	4-10
Black-and-white Warbler <i>Mniotilta varia</i>	24-77393 09-21-68	09-01-57 (13)	U-F	C. H. Blake, Hillsboro, N.C.	11-03
Prothonotary Warbler <i>Protonotaria citrea</i>	40-29355 05-10-45	06-16-40 (99)	AHY-M	J. M. Cadbury, Wyndmoor, Pa.	5-11
Golden-winged Warbler <i>Vermivora chrysoptera</i>	103-36078 05-17-68	05-19-62 (99)	AHY-M	L. H. Walkinshaw, Calhoun Co., Mich. PC-AB	6-11
Blue-winged Warbler <i>Vermivora pinus</i>	115-83964 05-27-73	06 01 68 (99)	AHY-U	F. L. Yokum, Ashtabula, Ohio PC-JK	5-11
"Brewster's Warbler" "Vermivora leucobronchialis"				T. D. Carter, Wyanokee N.J. EBBA 9:4, 1946	6-0
Tennessee Warbler <i>Vermivora peregrina</i>	113-63627 05-22-70	(99)	AHY-U	L. S. Ryan, Little Falls, Minn. PC-HF	4-11
Orange-crowned Warbler <i>Vermivora celata</i>	35-6621 06-09-40	06-28-35 (99)	AHY-F	E. C. Kinsey, Manor, Cal. PC-AB	6-0

Parula Warbler <i>Parula americana</i>	109-83371 09-19-71	09-16-67 (99)	HY-M	M. Metcalf, Marshfield, Vt.	PC-JK	4-03
Yellow Warbler <i>Dendroica petechia</i>				J. M. Conkey, N. Eastham, Mass. EBBA 9:4, 1941		7-02
Magnolia Warbler <i>Dendroica magnolia</i>	105-91409 05-12-70	05-23-64 (99)	AHY-M	R. Patterson, Mt. Desert, Me.	PC-HF & JK	6-11
Myrtle Warbler <i>Dendroica coronata</i>	H34352 02-01-40	10-23-33 (97 "killed")		G. Gill, Huntington, L.I., N.Y.	EBBA Oct., 1945	6-08
Black-throated Green Warbler <i>Dendroica virens</i>	31-43992 05-26-65	09-10-60 (99)	AHY-M	R. Patterson, Mt. Desert, Me.	PC-HF & JK	5-11
Chestnut-sided Warbler <i>Dendroica pensylvanica</i>	38-896 07-10-43	06-06-39 (99)	AHY-U M. Belisle	E. Goellner, Manchester, N.H.	PC-AB	5-01
Pine Warbler <i>Dendroica pinus</i>	59882 04-09-32	04-16-26 (99*)	AHY-U		Ring 77:95, 1973	6-10
Kirtland's Warbler <i>Dendroica kirtlandii</i>	34-51868 06-13-48	06-17-41 (99)	AHY-M	J. VanTyne, Oscoda Co., Mich.	PC-AB	8-0
Prairie Warbler <i>Dendroica discolor</i>	29-12914 09-17-65	09-15-56	AHY-M	D. Kraus, Kingston, R.I.	PC-JK	10-03
Western Palm Warbler <i>Dendroica palmarum palmarum</i>	114-89766 01-19-73	03-03-67 (99)	AHY-U	D. Mendinhal, Santibel, Fla.	PC-HF & JK	6-07
Yellow Palm Warbler <i>Dendroica palmarum hypochrysea</i>	34-28161 04-06-41	03-29-36 (99)	AHY-M	L. T. Melcher, Homosassa Springs, Fla.	PC-AB	5-10
Ovenbird <i>Seiurus aurocapillus</i>	69-67006 05-28-71	04-27-64 (99)	AHY-U C. F. Leck	J. Swinebroad, Somerset, N.J.	BB 43:214, 1973	7-11
Northern Waterthrush <i>Seiurus noveboracensis</i>	56-21329 05-13-73	07-18-65 (99)	HY-U	M. Metcalf, Marshfield, Vt.	PC-JK	6-11
Louisiana Waterthrush <i>Seiurus motacilla</i>	72-54884 05-02-70	05-14-67 (99)	AHY-M	Powdermill NR, Rector, Pa.	PC-JK	3-11
Yellowthroat <i>Geothlypis trichas</i>	38-30320 06-30-44	09-07-38 (99)	AHY-F	A. R. Laskey, Nashville, Tenn.	PC-AB	7-0

Yellow-breasted Chat <i>Icteria virens</i>	62-186066 05-07-72	05-26-64 (99)	AHY-U J. Stewart, Marietta, Ohio	L. Kiff, Pt. Pleasant, W.V. T. D. Carter, Wyanokee, N.J.	PC-HF & JK EBBA 9:4, 1946	8-11
Hooded Warbler <i>Wilsonia citrina</i>	106-69390 05-25-71	06-28-64 (00)	AHY-F Cleveland Hts., Ohio	R. Pantle, Candor, N.Y.	EBBA 36:165, 1973	4-11
Canada Warbler <i>Wilsonia canadensis</i>	140-51256 05-28-45	06-21-41 (99)	AHY-F	C. P. Mountz, Stow, Ohio	PC-AB	7-11
American Redstart <i>Setophaga ruticilla</i>	33-181475 01-20-74	05-15-64 (99)	HY-F	O. L. Austin, Jr., Gainesville, Fla.	PC-JK	4-11
House Sparrow <i>Passer domesticus</i>	582-47618 06-08-71	05-19-63 (89)	SY-M Hoven, S.D.	W. C. Royall, Houghton, S.C.		9-07
Yellow-headed Blackbird <i>Xanthocephalus xanthocephalus</i>	35-218437 11-29-49	10-03-35 (00)	HY-M Perquimans Co., N.C.	V. Burtch, Branchport, N.Y.	BB 22:115, 1951	9-0
Red-winged Blackbird <i>Agelaius phoeniceus</i>	422-16083 03-19-62	05-31-49 (99)	HY-U B. Hill	R. W. DeHaven, Shafters, Cal.	PC & WBB 48:10, 1973	14-05
Tricolored Blackbird <i>Agelaius tricolor</i>	40-143569 05-11-45	07-10-40 (99)	HY-U	R. Thomas, Little Rock, Ark.	BB 21:147, 1950	12-10
Orchard Oriole <i>Icterus spurius</i>	602-47292 10-07-73	05-15-67 (99)	AHY-U	Ms. B. Fisk, Homestead, Fla.	PC-JK	6-11
Spotted-breasted Oriole <i>Icterus pectoralis</i>	105-140355 06-28-72	05-09-67 (00)	SY-M San Diego, Cal.	A. M. Craig, Pt. Loma, Cal.	WBB 48:48, 1973	7-04
Hooded Oriole <i>Icterus cucullatus</i>	06-03-43 375331 02-16-35	05-29-37 (99)	U-U	C. A. Stevens, Fargo, N.D.	EBBA 36:29, 1973	6-0
Baltimore Oriole <i>Icterus galbula</i>	375331 02-16-35	06-14-26 (01)	HY-U C. Gillikin, Beaufort, N.C.	M. B. Gillespie, Oak Bluffs, Mass. S. Weakley	PC-JK EBBA 36:29, 1973	7-0
Eastern Meadowlark <i>Sturnella magna</i>	A453802 03-xx-45	12-30-32 (01)	U-U St. Petersburg, Fla.	D. M. Morrison, Gulfport, Fla.	BB 21:147, 1950	8-08
Rusty Blackbird <i>Euphagus carolinus</i>						8-07
Boat-tailed Grackle <i>Cassidix major</i>						12-09

Common Grackle <i>Quiscalus quiscula</i>	583-32101 07-23-72	U-U E. Brunswick, N.J.	G. Detweiler, Whiting, N.J.	PC-JK	16-01
Brown-headed Cowbird <i>Molothrus ater</i>	56-128526 05-14-71	AHY-F Salsbury, N.Y.	L. C. Stegeman, Syracuse, N.Y.	PC-HF	13-11
Scarlet Tanager <i>Piranga olivacea</i>	40-158464 07-08-56	AHY-M (00)	R. Middleton, Norristown, Pa.	EBBA 32:226, 1969	9-01
Summer Tanager <i>Piranga rubra</i>	31-127633 05-20-67	AHY-M (99)	C. H. Blake, Hillsboro, N.C.	PC-JK & IBB 40:61, 1968	5-11
Cardinal <i>Cardinalis cardinalis</i>	53-197516 02-06-68	HY-F (99)	E. Peacock, Fairfax, Va.	PC-JK	13-08
Rose-breasted Grosbeak <i>Pheucticus ludovicianus</i>	36-20091 05-12-45	AHY-M (96)	A. C. Goven, Lexington, Mass.	BB 21:148, 1958	8-11
Black-headed Grosbeak <i>Pheucticus melanocephalus</i>	A284151 06-28-38	AHY-U (99*)		Ring 77:95, 1973	6-0
Indigo Bunting <i>Passerina cyanea</i>	66-80840 07-16-69	AHY-F (99)	Powdermill NR, Rector, Pa.	PC-JK	8-01
Painted Bunting <i>Passerina ciris</i>	107-24331 10-31-73	AHY-U (99)	E. J. Fisk, Homestead, Fla.	PC-JK	8-04
Evening Grosbeak <i>Hesperiphona vespertina</i>	54-197708 11-30-68	AHY-M (89)	M. Broun, Hawk Mt., Pa.	EBBA 32:220, 1969	13-05
Purple Finch <i>Carpodacus purpureus</i>	53-63223 02-04-72	SY-M (99)	C. H. Blake, Hillsboro, N.C.	PC-JK & IBB 40:134, 1968	12-08
House Finch <i>Carpodacus mexicanus</i>	04-xx-53	AHY-F (89)	E. C. Ayer, Pamona, Cal. Sacramento, Cal.	WBB 29:44, 1954	10-10
Pine Grosbeak <i>Pinicola enucleator</i>	562-28345 03-15-70	AHY-M (45)	G. Loery, Morris, Conn.	PC-JK	8-09
Pine Siskin <i>Spinus pinus</i>	42-10197 01-06-34	U-U (99*)		Ring 77:96, 1973	5-11
American Goldfinch <i>Spinus tristis</i>	27-67397 04-22-66	AHY-M (99)	F. McCamey, Storrs, Conn. R. Lof, Storrs, Conn.	PC-JK	8-10

Rufous-sided Towhee <i>Pipilo erythrophthalmus</i>	26-152846 07-07-48	03-02-37 (99)	AHY-U	R. E. Ware, Clemson, S.C.	EBBA 26:225, 1963	12-03
Brown Towhee <i>Pipilo fuscus</i>	A274362 11-03-37	07-25-32 (01*)	HY-U		Ring 77:95, 1973	5-05
Abert's Towhee <i>Pipilo aberti</i>	37-217716 01-27-43	02-19-37 (01*)	AHY-U		Ring 77:95, 1973	6-07
Vesper Sparrow <i>Poocetes gramineus</i>	B91717 05-11-39	05-12-33 (99*)	AHY-U		Ring 77:95, 1973	6-11
Slate-colored Junco <i>Junco hyemalis</i>	F17189 03-05-41	04-07-31 (01)	AHY-U	M. Broun, Lenox, Mass. R. D. Epps, Conway, S.C.	BB 14:46, 1943	10-09
Oregon Junco <i>Junco hyemalis oregonus</i>	37-98767 10-08-45	11-30-37 (00)	U-U	E. K. Kinsey, Manor, Cal.	BB 21:148, 1950	8-04
Gray-headed Junco <i>Junco caniceps</i>	69-24368 12-28-72	01-12-64 (99)	AHY-U	B. McKnight, Cedar Crest, N.M.	WBB 48:49, 1973	8-06
Yellow-eyed Junco <i>Junco phaeonotus</i>	H72690 11-25-38	12-10-32 (99*)	U-U		Ring 77:95, 1973	6-05
Tree Sparrow <i>Spizella arborea</i>	65-58275 03-29-70	12-14-61 (99)	AHY-U	G. Leory, Morris, Conn.	PC-JK	8-09
Chipping Sparrow <i>Spizella passerina</i>				S. Stringer, Beachton, Ga.		
Field Sparrow <i>Spizella pusilla</i>	101-75429 05-03-67	08-25-61 (99)	AHY-U	Powdermill NR, Rector, Pa.	EBBA 10:4, 1946	9-09
Harris Sparrow <i>Zonotrichia querula</i>	01-14-73	01-09-64 (00)	AHY-U	W. Leushen, Wisner, Neb.	PC-JK	6-11
White-crowned Sparrow <i>Zonotrichia leucophrys</i>	613-746 10-21-42	12-26-69 (?)	U-U		PC-JK	9-07
Golden-crowned Sparrow <i>Zonotrichia atricapilla</i>	31-179464 12-16-70	12-21-61 (99)	U-U	W. A. Smith, Grey Lodge, Cal.	Ring 77:95, 1973 WBB 46:43, 1971	13-04 9-06
White-throated Sparrow <i>Zonotrichia albicollis</i>	20-173174 01-06-60	12-11-51 (99)	U-U	A. H. Fast	EBBA 26:228, 1963	9-07

Fox Sparrow <i>Passerella iliaca</i>	43516 04-30-29	03-18-20 (99*)	U-U		Ring 77:95, 1973	9-09
Swamp Sparrow <i>Melospiza georgiana</i>	71-58484 10-03-70	05-08-65 (99)	AHY-U	M. Metcalf, Plainfield, Vt.	PC-JK	6-04
Song Sparrow <i>Melospiza melodia</i>	78-79912 10-18-73	10-07-63 (99)	U-U	A. Collister, Longmont, Colo.	PC-JK	10-04
Snow Bunting <i>Plectrophenax nivalis</i>	S73527 02-11-42	02-22-34 (99)	AHY-U	O. M. Bryens, McMillan, Mich.	EBBA 36:29, 1973	8-08