July 31, 1981
MTAB-45

MEMORANDUM

TO : All Banders

FROM : Chief, Bird Banding Laboratory
Office of Migratory Bird Management
Laurel, Maryland 20708

SUBJECT:
1. Tabulation of encounters of 1975 banded birds
2. Bird Banding Manual additions and revisions
3. End-of-the-year report summary
4. Banding data analysis service
5. Banding schedules and codes
6. Requests for banding permit revisions
7. Pigeon associations' addresses
8. Bird Banding Laboratory ZIP Code
9. Inland Bird Banding Association meeting

1. A tabulation of 1979 banding totals and 1975 banding and recovery totals by species is enclosed. These data are provided primarily to aid in research planning.

2. Enclosed are several replacement pages and many additional age/sex keys to Part 6, Volume II of the Bird Banding Manual. These have again been printed and furnished to us by the Canadian Wildlife Service. Please insert the revisions and destroy the old pages. These keys replace Wood's Guide and other age/sex material.

3. End-of-the-Year Banding Report forms for 1980 were received from 2,189 banders. Special provisions were authorized as follow: auxiliary-marking, 714; waterfowl banding, 435; endangered species marking, 107; and Canadian authorizations, 45. Ninety-eight banders published magazine articles and 315 published in scientific journals.

4. Enclosed is some information from Dave DeSante on Point Reyes' Data Analysis Service. It is the beginning of a permanent system to store and make available for use information that we do not have in the Bird Banding Lab and also to furnish original banding information to the BBL. We encourage your cooperation with Point Reyes.

5. Many banders misuse the age codes. A "Review of Age Codes" is available from BBL which will clarify the proper use of these codes. Some banders also fail to read their Banding Schedule Evaluations, MTAB's and Bird Banding Manuals. Minor, but consistent, mistakes are made regularly on age and/or sex which cause delays in processing records. We suggest that banders use the Bird Banding Manual, Vol. II as their first reference. Wood's Guide (with the 1970 corrections and

1976 Update) or Robert's Birds of Minnesota should be used only for those species not yet printed in Vol. II. That is, a bander should start with the Bird Banding Manual, Vol. II and then use the others only if there is no information for that species in the Bird Banding Manual. If other techniques are used, bander's should explain the method in detail in the "remarks" section of the schedule or an attached letter.

It has become painfully obvious in recent years that without proper age and sex data (as well as species identification, latitude/longitude, and proper dates), certain important analyses of banding data cannot be made. Most banders apparently do not realize that when they fail to age and/or sex a bird that can be aged or sexed with 95% reliability at that time of year, their data are frequently ignored in subsequent analyses. We realize that there are many species that cannot be aged and/or sexed at certain times of the year. However, when it is possible to age or sex the bird through careful examination the bander should do so, or release the bird unbanded (for example, American Goldfinches).

6. Please consolidate all requests for any changes in your banding permit such as auxiliary-marking, additional nets, subpermittees, and additional States. Make your request at least 30 days prior to the date required. It is very time-consuming to retype permits for minor changes. Please note--auxiliary-marking authorization is not automatically renewed; request in advance of expiration. Mention your permit number in all correspondence.

7. For your use in replying to inquiries from the public, the pigeon associations' addresses have been changed as follow:

Charles E. Herin, National Secretary-Treasurer
The American Racing Pigeon Union
P. O. Box 26
Maineville, OH 45039

Mrs. Marie Rotondo, Secretary-Treasurer
International Federation of Homing Pigeon
Fanciers, Inc.
107 Jefferson Street
Belmont Hills, PA 19004

8. The new ZIP Code for the Bird Banding Laboratory is 20708.

9. The Inland Bird Banding Association will hold its annual meeting in Galveston, Texas, September 25-27, 1981. For further information, write to Allan J. Mueller, 7928 Pruitt Drive, Galveston, TX 77551.

George M. Jonkel

George M. Jonkel

Enclosures:
Tab - 1975 banded birds
BBM additions/revisions
Data analysis service

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
0010 WESTERN GREBE	57	46	0		0	
0020 RED NECKED GREBE	15	2	0		0	
0030 HORNED GREBE	108	49	0		0	
0040 EARED GREBE	274	184	3	2	0	
0060 PIED BILLED GREBE	35	14	0		0	
0070 COMMON LOON	39	38	4	11	0	
0100 ARCTIC LOON	4	7	0		0	
0110 RED THROATED LOON	0	5	0		0	
0120 TUFTED PUFFIN	34	84	0		0	
0130 COMMON PUFFIN	256	91	0		0	
0140 HORNED PUFFIN	44	14	0		0	
0150 RHINOCEROS AUKLET	21	261	2	1	0	
0160 CASSINS AUKLET	1,111	103	1	1	0	
0170 PARAKEET AUKLET	0	2	0		0	
0180 CRESTED AUKLET	0	15	0		0	
0190 WHISKERED AUKLET	0	2	0		0	
0200 LEAST AUKLET	0	29	0		0	
0210 ANCIENT MURRELET	37	203	1	+	0	
0250 XANTUS MURRELET	3	48	0		0	
0270 BLACK GUILLEMOT	117	74	0		0	
0290 PIGEON GUILLEMOT	175	111	2	2	0	
0300 COMMON MURRE	7	207	15	7	0	
0310 THICK BILLED MURRE	320	4	0		0	
0320 RAZOR BILLED AUK	2	0	0		0	
0360 POMARINE JAEGER	0	1	0		0	
0370 PARASITIC JAEGER	0	5	2	40	0	
0380 LONG TAILED JAEGER	21	76	0		0	
0390 IVORY GULL	0	205	2	1	0	
0400 BLK LEG KITTIWAKE	622	45	0		0	
0410 RED LEG KITTIWAKE	2	0	0		0	
0420 GLAUCOUS GULL	5	18	0		0	
0440 GLAUCOUS WING GULL	2,363	5,432	149	3	0	
0442 WEST X GLA WG GULL	5	0	0		0	
0470 GRT BLK BACK GULL	1,016	773	31	4	0	
0490 WESTERN GULL	4,341	2,462	116	5	0	
0510 HERRING GULL	11,584	13,284	405	3	0	
0519 THAYER GULL	4	0	0		0	
0530 CALIFORNIA GULL	2,602	897	15	2	0	
0534 UNIDENT GULL	377	31	3	10	0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
0540 RING BILLED GULL	19,453	14,449	341	2	3	+
0550 MEW GULL	22	3	0		0	
0580 LAUGHING GULL	8,318	6,789	116	2	0	
0590 FRANKLINS GULL	208	1	0		0	
0600 BONAPARTES GULL	2	4	0		0	
0601 LITTLE GULL	2	0	0		0	
0620 SABINES GULL	1	2	0		0	
0630 GULL BILLED TERN	41	287	1	+	0	
0640 CASPIAN TERN	3,540	365	4	1	1	+
0650 ROYAL TERN	14,151	11,172	240	2	28	+
0660 ELEGANT TERN	0	13	0		0	
0670 SANDWICH TERN	1,854	773	14	2	10	1
0690 FORSTERS TERN	137	81	0		0	
0700 COMMON TERN	20,890	10,221	117	1	79	1
0710 ARCTIC TERN	179	138	0		2	1
0720 ROSEATE TERN	1,144	1,080	15	1	6	1
0725 HYBRID TERN	3	4	0		0	
0740 LEAST TERN	3,380	1,228	3	+	0	
0750 SOOTY TERN	7,010	21,493	16	+	0	
0760 BRIDLED TERN	72	0	0		0	
0761 GRAY-BACKED TERN	215	8	0		0	
0770 BLACK TERN	4	66	0		0	
0781 BLUE GRAY NODDY	1	2	0		0	
0790 NODDY TERN	40	299	3	1	0	
0791 HAWAIIAN NODDY	84	29	0		0	
0792 FAIRY TERN	1,351	85	0		0	
0793 BLACK NODDY	63	0	0		0	
0800 BLACK SKIMMER	1,409	1,337	21	2	6	+
0810 BLACK FT ALBATROSS	4,436	0	0		0	
0811 HYBRID ALBATROSS	4	0	0		0	
0820 SHORT T ALBATROSS	21	0	0		0	
0821 LAYSAN ALBATROSS	1,350	0	0		0	
0822 BLK BROW ALBATROSS	5	275	2	1	0	
0860 FULMAR	50	82	0		0	
0890 GREATER SHEARWATER	0	1	0		0	
0908 NEWELLS SHEARWATER	1,361	0	0		0	
0920 AUDUBON SHEARWATER	6	13	0		0	
0950 SOOTY SHEARWATER	0	1	0		0	
0961 WEDGE T SHEARWATER	1,147	50	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80 — All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
0964 XMAS IS SHEARWATER	6	2	0		0	
0985 DARK-RUMPED PETREL	14	3	0		0	
0991 BONIN ISLAND PTRL	1,202	0	0		0	
1010 BULWERS PETREL	29	0	0		0	
1050 FORK TAILED PETREL	696	46	0		0	
1060 LEACHS PETREL	3,733	2,578	55	2	4	+
1062 HARCOURTS PETREL	2	0	0		0	
1080 ASHY PETREL	15	30	1	3	0	
1082 SOOTY STORM PETREL	11	0	0		0	
1090 WILSONS PETREL	18	25	0		1	4
1101 WHITE-TH STRM PTRL	43	0	0		0	
1130 RED BIL TROPICBIRD	25	0	0		0	
1131 RECTAIL TROPICBIRD	253	19	0		0	
1140 BLUE FACED BOOBY	221	218	1	+	0	
1141 BLUE FOOTED BOOBY	9	0	0		0	
1150 BROWN BOOBY	156	79	4	5	0	
1160 RED FOOTED BOOBY	598	113	2	2	0	
1170 GANNET	193	0	0		0	
1180 ANHINGA	0	12	0		0	
1190 GREAT CORMORANT	11	100	5	5	0	
1200 DBLE CR CORMORANT	3,308	1,035	59	6	1	+
1220 BRANDTS CORMORANT	412	425	27	6	0	
1230 PELAGIC CORMORANT	1	223	11	5	0	
1240 RED FACE CORMORANT	0	7	1	14	0	
1250 WHITE PELICAN	1,098	1,080	56	5	0	
1260 E BROWN PELICAN	1,621	2,806	122	4	0	
1280 MAGNIF FRIGATEBIRD	0	82	0		0	
1281 GREAT FRIGATE BIRD	504	96	0		0	
1290 COMMON MERGANSER	19	66	4	6	0	
1300 RED BR MERGANSER	10	4	0		0	
1310 HOODED MERGANSER	109	117	13	11	0	
1320 MALLARD	148,515	96,266	11,245	12	762	1
1321 BLK X MAL HYBRID	514	530	46	9	3	1
1324 LAYSAN TEAL	448	0	0		0	
1326 HAWAIIAN DUCK	119	0	0		0	
1327 MALLARD X WIDGEON	0	1	0		0	
1330 BLACK DUCK	17,906	10,566	1,253	12	79	1
1331 MEXICAN DUCK	0	12	0		0	
1340 MOTTLED DUCK	1,043	209	33	16	0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80 — All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
1350 GADWALL	1,622	1,601	165	10	10	1
1360 EUROPEAN WIDGEON	7	2	1	50	0	
1370 AMERICAN WIDGEON	2,996	3,579	354	10	9	+
1380 COMMON TEAL	331	0	0		0	
1390 GREEN WINGED TEAL	5,999	6,458	411	6	11	+
1400 BLUE WINGED TEAL	33,628	20,891	891	4	51	+
1401 UNIDENTIFIED TEAL	817	940	19	2	3	+
1402 BW X CINN TEAL HYB	0	6	1	17	0	
1403 GARGANEY TEAL	3	0	0		0	
1410 CINNAMON TEAL	457	551	29	5	0	
1420 SHOVELER	333	499	26	5	0	
1430 PINTAIL	33,773	19,791	1,448	7	124	1
1431 MALLARD X PINTAIL	6	1	0		0	
1439 BAHAMA DUCK	2	0	0		0	
1440 WOOD DUCK	24,276	23,004	2,244	10	43	+
1450 UNIDENTIFIED DUCK	8	17	5	29	0	
1451 UNIDENTIFIED GOOSE	0	15	7	47	1	7
1460 REDHEAD	4,538	3,755	377	10	99	3
1470 CANVASBACK	4,916	4,591	372	8	89	2
1480 GREATER SCAUP	175	145	14	10	1	1
1489 UNIDENTIFIED SCAUP	13	48	4	8	0	
1490 LESSER SCAUP	3,283	2,985	145	5	5	+
1500 RING NECKED DUCK	2,310	1,581	199	13	0	
1510 COMMON GOLDENEYE	362	193	23	12	0	
1520 BARROWS GOLDENEYE	23	520	5	1	0	
1530 BUFFLEHEAD	25	139	15	11	1	1
1540 OLDSQUAW	51	135	3	2	0	
1550 HARLEQUIN DUCK	43	11	0		0	
1570 STELLERS EIDER	516	886	20	2	0	
1600 COMMON EIDER	328	502	32	6	0	
1630 COMMON SCOTER	1	0	0		0	
1650 WHITE WING SCOTER	61	51	0		0	
1660 SURF SCOTER	0	4	0		0	
1670 RUDDY DUCK	442	417	17	4	0	
1690 LESSER SNOW GOOSE	9,549	10,132	1,479	15	185	2
1691 BLUE GOOSE	8,714	5,358	667	12	62	1
1695 SNOW X BLUE HYBRID	32	0	0		0	
1696 SNOW X CAN HYBRID	0	3	2	67	0	
1699 GREATER SNOW GOOSE	7	476	51	11	5	1

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
1700 ROSS GOOSE	153	1,218	164	13	5	+
1703 SNOW X ROSS HYBRID	1	1	1	100	0	
1710 WHITE FRONT GOOSE	4,227	2,676	316	12	162	6
1720 CANADA GOOSE	53,764	47,351	8,002	17	890	2
1721 ALEUT CANADA GOOSE	294	77	13	17	3	4
1727 CACKLING GOOSE	554	731	91	12	1	+
1729 SMALL CAN GOOSE	1,274	2,430	311	13	40	2
1730 BRANT	1,841	792	56	7	11	1
1731 BRANT-BLK BRANT HY	0	533	115	22	1	+
1740 BLACK BRANT	1,623	1,342	58	4	5	+
1752 HAWAIIAN GOOSE	0	2	0		0	
1760 EMPEROR GOOSE	0	6	0		0	
1770 BLK BELL TREE DUCK	83	126	7	6	0	
1780 FULVOUS TREE DUCK	511	86	0		0	
1782 MUTE SWAN	87	18	3	17	0	
1800 WHISTLING SWAN	171	532	39	7	5	1
1810 TRUMPETER SWAN	102	71	6	8	0	
1820 AMERICAN FLAMINGO	0	1,005	18	2	0	
1830 ROSEATE SPOONBILL	204	0	0		0	
1840 WHITE IBIS	467	351	0		0	
1860 GLOSSY IBIS	355	49	0		0	
1870 WHITE FACED IBIS	396	475	14	3	0	
1880 WOOD IBIS	392	300	0		0	
1900 AMERICAN BITTERN	9	15	0		0	
1910 EAST LEAST BITTERN	21	19	0		0	
1919 WEST LEAST BITTERN	0	1	0		0	
1940 GREAT BLUE HERON	292	1,020	44	4	0	
1960 COMMON EGRET	555	359	7	2	0	
1970 SNOWY EGRET	1,562	520	3	1	0	
1980 REDDISH EGRET	48	334	3	1	0	
1990 LOUISIANA HERON	733	687	1	+	0	
2000 LITTLE BLUE HERON	657	497	1	+	0	
2001 CATTLE EGRET	979	3,341	10	+	0	
2010 GREEN HERON	147	136	0		0	
2020 BLK CROWN NT HERON	2,556	2,241	31	1	0	
2030 YEL CROWN NT HERON	1	49	0		0	
2040 WHOOPING CRANE	14	5	0		0	
2050 GR SANDHILL CRANE	147	33	4	12	0	
2060 SANDHILL CRANE	1,124	35	4	11	0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
2070 LIMPKIN	33	48	0		0	
2080 KING RAIL	0	41	0		0	
2110 CLAPPER RAIL	41	1,000	16	2	2	+
2120 VIRGINIA RAIL	7	723	0		0	
2140 SORA	18	100	0		0	
2150 YELLOW RAIL	3	28	0		0	
2160 BLACK RAIL	0	2	0		0	
2180 PURPLE GALLINULE	9	1	0		0	
2190 COMMON GALLINULE	42	154	2	1	0	
2210 AMERICAN COOT	1,722	2,986	141	5	0	
2220 RED PHALAROPE	68	138	0		0	
2230 NORTHERN PHALAROPE	271	15	0		0	
2240 WILSONS PHALAROPE	36	63	0		0	
2250 AMERICAN AVOCET	52	29	0		0	
2260 BLACK NECKED STILT	116	21	0		0	
2280 AMERICAN WOODCOCK	2,129	2,222	142	6	0	
2300 COMMON SNIPE	478	162	2	1	0	
2310 SHRT BIL DOWITCHER	151	96	1	1	0	
2320 LNG BIL DOWITCHER	31	147	0		0	
2321 DOWITCHER SP.	0	13	0		0	
2330 STILT SANDPIPER	84	322	0		0	
2340 KNOT	87	72	0		0	
2350 PURPLE SANDPIPER	1	230	1	+	0	
2356 ROCK SANDPIPER	110	5	0		0	
2380 SHP TAIL SANDPIPER	12	0	0		0	
2390 PECTORAL SANDPIPER	601	224	0		0	
2400 WHT RUMP SANDPIPER	345	880	4	+	0	
2410 BAIRDS SANDPIPER	13	36	0		0	
2420 LEAST SANDPIPER	2,036	2,149	4	+	0	
2430 DUNLIN	2,860	209	0		0	
2460 SEMIPAL SANDPIPER	7,732	6,962	13	+	10	+
2467 UNIDENT SANDPIPER	13	42	0		0	
2470 WESTERN SANDPIPER	4,414	990	0		0	
2480 SANDERLING	168	208	0		0	
2490 MARBLED GODWIT	9	3	0		0	
2510 HUDSONIAN GODWIT	23	36	0		0	
2540 GREATER YELLOWLEGS	22	9	0		0	
2550 LESSER YELLOWLEGS	264	124	1	1	0	
2560 SOLITARY SANDPIPER	33	85	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
2580 WILLET	74	43	0		0	
2590 WANDERING TATTLER	0	1	0		0	
2610 UPLAND PLOVER	53	67	0		0	
2620 BUFF BR SANDPIPER	33	4	0		0	
2630 SPOTTED SANDPIPER	382	369	1	+	0	
2640 LONG BILLED CURLEW	94	9	0		0	
2650 WHIMBREL	5	27	1	4	1	4
2700 BLK BELLIED PLOVER	32	60	0		0	
2720 AM GOLDEN PLOVER	43	3	0		0	
2730 KILLDEER	342	330	5	2	0	
2740 SEMIPALMATE PLOVER	397	256	1	+	0	
2770 PIPING PLOVER	63	105	4	4	0	
2780 SNOWY PLOVER	168	5	0		0	
2800 WILSONS PLOVER	24	4	0		0	
2810 MOUNTAIN PLOVER	3	52	0		0	
2830 RUDDY TURNSTONE	99	119	0		0	
2840 BLACK TURNSTONE	70	4	0		0	
2860 AM OYSTERCATCHER	29	20	0		0	
2870 BLK OYSTERCATCHER	13	26	0		0	
2880 JACANA	0	62	0		0	
2910 MASKED BOBWHITE	0	58	0		0	
3120 BAND TAILED PIGEON	938	5,655	168	3	7	+
3131 ROCK DOVE	17	41	1	2	0	
3140 WHITE CROWN PIGEON	1,495	229	7	3	0	
3151 SPOTTED DOVE	47	12	0		0	
3152 RINGED TURTLE DOVE	1	5	0		0	
3160 MOURNING DOVE	10,101	32,705	841	3	6	+
3170 ZENAIDA DOVE	3	27	0		0	
3180 WHITE FRONTED DOVE	38	45	0		0	
3181 WH-BELLIED DOVE	0	1	0		0	
3190 WHITE WINGED DOVE	238	2,549	99	4	0	
3200 GROUND DOVE	884	247	3	1	0	
3201 RUDDY GROUND DOVE	2	12	0		0	
3210 INCA DOVE	726	162	3	2	0	
3250 TURKEY VULTURE	113	98	6	6	0	
3260 BLACK VULTURE	242	89	0		0	
3280 WHITE TAILED KITE	7	17	0		0	
3290 MISSISSIPPI KITE	57	3	0		0	
3300 EVERGLADE KITE	156	1	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80 All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
3310 MARSH HAWK	452	263	4	2	0	
3320 SHARP SHINNED HAWK	12,110	9,384	73	1	19	+
3330 COOPERS HAWK	1,037	684	8	1	0	
3340 GOSHAWK	263	366	13	4	1	+
3350 HARRIS HAWK	147	162	2	1	0	
3370 RED TAILED HAWK	2,634	3,268	104	3	5	+
3376 HARLANS HAWK	1	2	0		0	
3390 RED SHOULDER HAWK	263	402	7	2	1	+
3410 WHITE TAILED HAWK	0	1	0		0	
3420 SWAINSONS HAWK	768	454	15	3	1	+
3430 BROAD WINGED HAWK	288	226	5	2	0	
3431 ROADSIDE HAWK	0	4	0		0	
3450 BLACK HAWK	0	3	0		0	
3460 GRAY HAWK	0	24	2	8	0	
3470 ROUGH LEGGED HAWK	53	129	7	5	0	
3480 FERRUGINOUS HAWK	1,008	514	18	4	0	
3490 GOLDEN EAGLE	247	325	21	6	1	+
3520 BALD EAGLE	691	326	34	10	4	1
3547 GYRFALCON	19	31	1	3	0	
3550 PRAIRIE FALCON	736	680	19	3	7	1
3560 PEREGRINE FALCON	760	227	7	3	0	
3570 PIGEON HAWK	696	271	5	2	0	
3600 SPARROW HAWK	6,191	5,319	85	2	13	+
3620 CARACARA	1	7	0		0	
3640 OSPREY	894	881	42	5	3	+
3650 BARN OWL	971	448	28	6	0	
3660 LONG EARED OWL	361	226	2	1	0	
3670 SHORT EARED OWL	70	29	0		0	
3680 BARRED OWL	89	68	4	6	0	
3690 SPOTTED OWL	9	20	0		0	
3700 GREAT GRAY OWL	85	2	0		0	
3710 BOREAL OWL	19	11	0		0	
3720 SAW WHET OWL	1,001	817	7	1	4	+
3730 SCREECH OWL	577	516	12	2	0	
3740 FLAMMULATED OWL	18	7	0		0	
3750 GREAT HORNED OWL	926	963	62	6	2	+
3760 SNOWY OWL	37	98	6	6	0	
3770 HAWK OWL	22	26	0		0	
3780 BURROWING OWL	98	109	1	1	0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
3790 PYGMY OWL	0	1	0		0	
3800 FERRUGINOUS OWL	1	9	0		0	
3810 ELF OWL	13	1	0		0	
3830 SMOOTH BILLED ANI	0	1	0		0	
3840 GROOVE BILLED ANI	0	5	0		0	
3850 ROADRUNNER	58	26	0		0	
3870 YELLOW BILL CUCKOO	284	161	0		0	
3880 BLACK BILL CUCKOO	250	194	0		0	
3890 COP TAILED TROGON	5	0	0		0	
3900 BELTED KINGFISHER	220	129	1	1	0	
3910 GREEN KINGFISHER	9	0	0		0	
3930 HAIRY WOODPECKER	515	705	2	+	0	
3940 DOWNY WOODPECKER	2,642	3,010	10	+	1	+
3950 RED COCKADED WDPKR	261	47	0		0	
3960 LADDER BACK WDPKR	25	16	0		0	
3970 NUTTALL WOODPECKER	13	6	0		0	
3990 WHITE H WOODPECKER	2	8	0		0	
4000 BLK BACK 3 TOE WDP	3	4	0		0	
4010 N 3 TOE WOODPECKER	2	0	0		0	
4020 YEL BEL SAPSUCKER	473	802	0		0	
4029 RED NAPE SAPSUCKER	24	51	0		0	
4030 RED BR SAPSUCKER	14	12	0		0	
4040 WMS SAPSUCKER	4	17	0		0	
4050 PILEATED WOODPECKR	32	27	0		0	
4060 RED HD WOODPECKER	190	187	1	1	0	
4070 ACORN WOODPECKER	81	129	0		0	
4080 LEWIS WOODPECKER	0	6	0		0	
4090 RED BEL WOODPECKER	430	391	4	1	0	
4100 GOLD FR WOODPECKER	11	6	0		0	
4110 GILA WOODPECKER	142	79	1	1	0	
4120 YELL SHAFT FLICKER	1,259	1,217	5	+	0	
4123 FLICKER HYBRID	20	17	0		0	
4130 RED SHAFT FLICKER	84	99	2	2	0	
4140 GILDED FLICKER	12	17	0		0	
4160 CHUCK WILLS WIDOW	7	20	0		0	
4170 WHIP POOR WILL	48	61	0		0	
4180 POOR WILL	14	17	0		0	
4190 PALRAQUE	2	2	0		0	
4200 COMMON NIGHTHAWK	55	30	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
4220 BLACK SWIFT	4	3	0		0	
4230 CHIMNEY SWIFT	675	876	1	+	0	
4240 VAUXS SWIFT	9	140	0		0	
4250 WHITE THROAT SWIFT	1	4	0		0	
4280 RUBY THR HUMMGBIRD	383	432	0		0	
4290 BL CHIN HUMMGBIRD	134	3	0		0	
4300 COSTAS HUMMINGBIRD	0	1	0		0	
4310 ANNAS HUMMINGBIRD	271	115	0		0	
4320 BROAD T HUMMGBIRD	94	12	0		0	
4330 RUFOUS HUMMINGBIRD	147	30	0		0	
4340 ALLENS HUMMINGBIRD	63	21	0		0	
4360 CALLIOPE HUMMGBIRD	3	0	0		0	
4409 UNIDFD HUMMINGBIRD	146	0	0		0	
4411 ROSE THROAT BEOARD	0	2	0		0	
4430 SCISSOR T FLYCATCH	734	52	0		0	
4440 EASTERN KINGBIRD	469	209	0		0	
4450 GRAY KINGBIRD	4	5	0		0	
4460 TROPICAL KINGBIRD	1	1	0		0	
4470 WESTERN KINGBIRD	110	31	0		0	
4480 CASSINS KINGBIRD	11	0	0		0	
4490 KISKADE FLYCATCHER	2	3	0		0	
4510 SUL BEL FLYCATCHER	1	0	0		0	
4520 GR CR FLYCATCHER	539	547	0		0	
4530 WIED CR FLYCATCHER	31	21	0		0	
4531 NUTTINGS FLYCATCH	0	5	0		0	
4540 ASH THR FLYCATCHER	116	69	0		0	
4550 OLIVACE FLYCATCHER	0	17	0		0	
4560 EASTERN PHOEBE	1,262	1,594	1	+	0	
4570 SAYS PHOEBE	46	54	0		0	
4580 BLACK PHOEBE	62	409	1	+	3	1
4590 OLIVE S FLYCATCHER	54	73	0		0	
4610 EASTERN WOOD PEWEE	801	799	0		0	
4620 WESTERN WOOD PEWEE	103	248	0		0	
4630 YEL BEL FLYCATCHER	1,367	1,009	0		0	
4640 WESTERN FLYCATCHER	341	297	0		0	
4650 ACADIAN FLYCATCHER	348	441	0		0	
4660 TRAILLS FLYCATCHER	1,480	1,001	2	+	0	
4663 ALDER FLYCATCHER	37	28	0		0	
4664 WILLOW FLYCATCHER	22	28	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
4670 LEAST FLYCATCHER	3,321	2,846	1	+	0	
4679 UNICENT EMPIDONAX	54	297	0		0	
4680 HAMMOND FLYCATCHER	47	51	0		0	
4690 DUSKY FLYCATCHER	157	152	0		0	
4691 GRAY FLYCATCHER	23	19	0		0	
4710 VERMILION FLYCATCH	6	0	0		0	
4720 BEARDLESS FLYCATCH	4	0	0		0	
4730 SKYLARK	3	0	0		0	
4740 HORNED LARK	110	485	4	1	0	
4750 BLACK BILL MAGPIE	876	110	3	3	0	
4760 YELLOW BILL MAGPIE	8	0	0		0	
4770 BLUE JAY	13,856	13,462	137	1	13	+
4780 STELLERS JAY	180	276	1	+	0	
4810 SCRUB JAY	390	402	11	3	0	
4820 MEXICAN JAY	125	58	0		0	
4830 GREEN JAY	5	2	0		0	
4840 GRAY JAY	157	50	0		0	
4860 COMMON RAVEN	832	294	15	5	0	
4870 WHITE NECKED RAVEN	3	3	0		0	
4880 COMMON CROW	275	183	7	4	0	
4890 NORTHWESTERN CROW	89	0	0		0	
4900 FISH CROW	24	0	0		0	
4904 HAWAIIAN CROW	6	7	0		0	
4910 CLARKS NUTCRACKER	0	4	0		0	
4920 PINON JAY	70	426	0		1	+
4930 STARLING	7,127	10,731	165	2	3	+
4932 INDIAN MYNA	5	0	0		0	
4933 JAPANESE WHITE-EYE	469	0	0		0	
4940 BOBOLINK	213	125	0		0	
4950 BROWN HEAD COWBIRD	9,465	26,382	144	1	17	+
4960 BRONZED COWBIRD	25	10	0		0	
4970 YEL HEAD BLACKBIRD	1,546	5,459	16	+	1	+
4980 REDWING BLACKBIRD	13,898	12,836	65	1	12	+
4982 YEL-SH BLACKBIRD	1	55	0		0	
5000 TRICOLOR BLACKBIRD	2	152	0		0	
5010 EASTERN MEADOWLARK	116	85	0		0	
5011 WESTERN MEADOWLARK	29	74	0		0	
5031 LICHTENSTNS ORIOLE	2	2	0		0	
5032 SPOTTED BR ORIOLE	2	16	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
5033 BLACKVENTED ORICLE	0	1	0		0	
5040 SCOTTS ORIOLE	11	2	0		0	
5050 HOODED ORIOLE	50	35	0		0	
5060 ORCHARD ORIOLE	182	164	0		0	
5070 BALTIMORE ORIOLE	2,396	2,076	3	+	0	
5078 BALXBUL ORIOLE HYB	9	0	0		0	
5080 BULLOCKS ORIOLE	283	255	0		0	
5090 RUSTY BLACKBIRD	111	295	0		0	
5100 BREWERS BLACKBIRD	455	441	4	1	0	
5110 GRACKLE, PURP/FLA	14,469	18,435	336	2	7	+
5130 BOAT TAIL GRACKLE	179	13	1	8	0	
5139 GREAT-TAIL GRACKLE	27	1,501	32	2	0	
5140 EVENING GROSBEAK	14,727	27,581	202	1	129	+
5150 PINE GROSBEAK	153	4	0		0	
5170 PURPLE FINCH	17,944	27,412	45	+	46	+
5180 CASSINS FINCH	1,187	437	0		0	
5190 HOUSE FINCH	18,177	9,975	40	+	29	+
5210 RED CROSSBILL	17	51	0		0	
5220 WHT WING CROSSBILL	7	24	0		0	
5240 GRAY CR ROSY FINCH	152	267	1	+	0	
5260 BR CAP ROSY FINCH	8	141	0		0	
5270 HOARY REDPOLL	611	96	0		0	
5275 UNIDENT REDPOLL	347	103	0		0	
5280 COMMON REDPOLL	1,272	706	1	+	0	
5290 AMERICAN GOLDFINCH	31,285	23,682	37	+	30	+
5300 LESSER GOLDFINCH	230	192	0		0	
5310 LAWRENCE GOLDFINCH	9	5	0		0	
5330 PINE SISKIN	2,711	3,026	7	+	3	+
5340 SNOW BUNTING	735	577	3	1	0	
5350 MCKAYS BUNTING	8	25	0		0	
5360 LAPLAND LONGSPUR	296	318	0		0	
5370 SMITHS LONGSPUR	0	1	0		0	
5380 CHEST COL LONGSPUR	2	70	0		0	
5390 MCCOWNS LONGSPUR	0	16	0		0	
5400 VESPER SPARROW	404	456	0		0	
5420 SAVANNAH SPARROW	2,470	1,882	0		0	
5450 BAIRDS SPARROW	1	1	0		0	
5460 GRASSHOPPER SPAR	149	79	0		0	
5470 HENSLOWS SPARROW	5	6	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
5480 LE CONTES SPARROW	3	8	0		0	
5490 SHARP TAIL SPARROW	346	111	0		0	
5500 SEASIDE SPARROW	362	40	0		0	
5511 CAPE SABLE SPARROW	0	26	0		0	
5520 LARK SPARROW	210	66	0		0	
5530 HARRIS SPARROW	1,179	1,858	0		0	
5540 WHITE CROWNED SPAR	4,290	6,531	5	+	1	+
5546 MTN WH CROWN SPAR	74	0	0		0	
5547 PUGET S SPARROW	402	509	1	+	0	
5548 NUTTALLS SPARROW	598	95	0		0	
5549 GAMBELS SPARROW	3,636	5,711	6	+	1	+
5570 GOLDEN CR SPARROW	1,046	1,281	2	+	0	
5580 WHITE THR SPARROW	23,332	31,236	24	+	5	+
5590 TREE SPARROW	7,598	15,961	15	+	6	+
5600 CHIPPING SPARROW	3,999	4,612	2	+	2	+
5610 CLAY COLOR SPARROW	319	611	0		0	
5620 BREWERS SPARROW	245	279	0		0	
5630 FIELD SPARROW	2,814	3,824	3	+	0	
5640 WORTHENS SPARROW	1	0	0		0	
5650 BLACK CHIN SPARROW	15	0	0		0	
5660 WHITE WINGED JUNCO	110	169	0		1	1
5670 SLATE COLOR JUNCO	23,387	41,228	33	+	8	+
5677 UNIDENTIFIED JUNCO	546	184	2	1	0	
5679 OREGON JUNCO	2,948	3,755	3	+	2	+
5700 MEXICAN JUNCO	12	158	1	1	0	
5708 GRAY HEADED JUNCO	511	270	0		0	
5730 BLACK THR SPARROW	109	44	0		0	
5740 SAGE SPARROW	23	7	0		0	
5750 BACHMANS SPARROW	4	8	0		0	
5760 BOTTERIS SPARROW	0	5	0		0	
5770 FIVE-STRIP SPARROW	4	17	0		0	
5780 CASSINS SPARROW	1	6	0		0	
5790 RUFOUS WINGED SPAR	3	10	0		0	
5800 RUFOUS CROWN SPAR	57	4	0		0	
5810 SONG SPARROW	11,832	15,263	19	+	0	
5830 LINCOLNS SPARROW	2,734	2,822	0		2	+
5840 SWAMP SPARROW	2,226	3,852	0		0	
5850 FOX SPARROW	1,375	1,953	3	+	0	
5860 OLIVE SPARROW	4	28	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80 — All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
5870 RUFOUS SIDE TOWHEE	2,601	2,640	1	+	2	+
5880 SPOTTED TOWHEE	274	414	1	+	0	
5910 BROWN TOWHEE	364	259	4	2	0	
5920 ABERTS TOWHEE	124	31	0		0	
5921 GREEN TAIL TOWHEE	244	169	0		0	
5922 BRAZILIAN CARDINAL	1	0	0		0	
5930 CARDINAL	10,152	9,754	42	+	1	+
5940 PYRRHULOXIA	78	64	0		0	
5950 ROSE BR GROSBEAK	2,794	3,278	7	+	0	
5956 HYBRID GROSBEAK	0	1	0		0	
5960 BLK HEAD GROSBEAK	152	278	0		0	
5970 BLUE GROSBEAK	115	101	0		0	
5980 INDIGO BUNTING	2,992	3,173	4	+	0	
5989 INDXLAZ BUNTING HY	0	1	0		0	
5990 LAZULI BUNTING	723	688	1	+	0	
6000 VARIED BUNTING	2	2	0		0	
6010 PAINTED BUNTING	207	191	1	1	0	
6020 WHT COL SEEDEATER	71	46	0		0	
6030 BLK FACE GRASSQUIT	21	36	0		0	
6040 DICKCISSEL	325	84	1	1	0	
6050 LARK BUNTING	3	280	2	1	0	
6070 WESTERN TANAGER	135	211	0		0	
6080 SCARLET TANAGER	700	1,018	1	+	0	
6090 HEPATIC TANAGER	2	3	0		0	
6100 SUMMER TANAGER	141	206	0		0	
6110 PURPLE MARTIN	4,836	3,266	31	1	2	+
6120 CLIFF SWALLOW	3,301	2,277	2	+	0	
6121 CAVE SWALLOW	1	0	0		0	
6130 BARN SWALLOW	3,596	4,982	5	+	1	+
6140 TREE SWALLOW	13,138	10,975	27	+	1	+
6150 VIOLET GRN SWALLOW	59	78	0		0	
6160 BANK SWALLOW	3,768	4,080	1	+	0	
6170 ROUGH WING SWALLOW	178	129	0		0	
6180 BOHEMIAN WAXWING	217	83	1	1	0	
6190 CEDAR WAXWING	3,507	3,592	11	+	0	
6200 PHAINOPEPLA	17	12	0		0	
6210 NORTHERN SHRIKE	31	55	0		0	
6220 LOGGERHEAD SHRIKE	234	131	0		0	
6230 BLK WHISKER VIREO	2	27	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
6240 RED EYED VIREO	4,697	5,342	0		0	
6250 YELLOW GREEN VIREO	6	15	0		0	
6260 PHILADELPHIA VIREO	594	727	0		0	
6270 WARBLING VIREO	643	474	0		0	
6280 YELLOW THR VIREO	95	96	0		0	
6290 SOLITARY VIREO	719	809	0		0	
6310 WHITE EYED VIREO	830	790	0		1	+
6320 HUTTONS VIREO	70	29	0		0	
6330 BELLS VIREO	89	44	0		0	
6340 GRAY VIREO	1	0	0		0	
6350 BAHAMA HON CREEPER	37	98	0		0	
6351 APAPANE	217	0	0		0	
6353 IIWI	38	0	0		0	
6354 AMAKIHI	317	86	0		0	
6360 BLK AND WHITE WARB	2,696	2,864	4	+	0	
6361 AKEPA	1	0	0		0	
6370 PROTHONOTARY WARB	162	111	1	1	0	
6380 SWAINSONS WARBLER	17	74	0		0	
6390 WORM EATING WARBLR	149	323	0		0	
6400 BACHMANS WARBLER	12	0	0		0	
6410 BLUE WING WARBLER	367	377	0		0	
6412 BREWSTERS WARBLER	8	13	0		0	
6413 LAWRENCES WARBLER	1	2	0		0	
6420 GOLDEN WING WARBLR	155	228	0		0	
6430 LUCYS WARBLER	54	31	0		0	
6440 VIRGINIAS WARBLER	45	66	0		0	
6450 NASHVILLE WARBLER	2,939	4,179	0		0	
6460 ORANGE CR WARBLER	1,486	1,241	1	+	0	
6470 TENNESSEE WARBLER	7,184	5,891	0		1	+
6480 PARULA WARBLER	511	562	0		0	
6490 OLIVE BACK WARBLER	1	0	0		0	
6500 CAPE MAY WARBLER	3,072	2,547	4	+	0	
6520 YELLOW WARBLER	4,771	3,780	2	+	0	
6525 HYBRID WARBLER	0	1	0		0	
6540 BLK THR BLUE WARB	1,626	2,380	0		0	
6550 MYRTLE WARBLER	24,040	21,958	9	+	3	+
6556 AUD X MYRTLE WARB	5	9	0		0	
6560 AUDUBONS WARBLER	1,036	1,122	0		0	
6570 MAGNOLIA WARBLER	6,559	5,780	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80 All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
6580 CERULEAN WARBLER	22	24	0		0	
6590 CHESTNUT SIDE WARB	1,278	1,689	0		0	
6600 BAY BREAST WARBLER	3,600	3,098	1	+	0	
6610 BLACKPOLL WARBLER	3,280	4,620	1	+	1	+
6620 BLACKBURNIAN WARB	778	609	1	+	0	
6630 YELLOW THR WARBLER	34	48	0		0	
6650 BLK THR GR WARBLER	20	30	0		0	
6670 BLK THR GN WARBLER	1,362	1,335	1	+	0	
6680 TOWNSENDS WARBLER	96	174	0		0	
6689 HERMIT X TOWNSENDS	1	1	0		0	
6690 HERMIT WARBLER	18	31	0		1	3
6700 KIRTLANDS WARBLER	69	0	0		0	
6701 ELFIN WOOD WARBLER	0	1	0		0	
6710 PINE WARBLER	115	323	0		0	
6720 WEST PALM WARBLER	1,177	922	1	+	0	
6729 YELL PALM WARBLER	537	178	0		0	
6730 PRAIRIE WARBLER	217	322	0		0	
6740 OVENBIRD	4,115	5,206	3	+	0	
6750 NC WATERTHRUSH	2,668	2,287	1	+	0	
6760 LA WATERTHRUSH	112	176	0		0	
6770 KENTUCKY WARBLER	297	574	1	+	0	
6780 CONNECTICUT WARBLR	203	158	0		0	
6790 MOURNING WARBLER	867	841	0		0	
6800 MACGILLIVRAYS WARB	189	374	0		0	
6810 YELLOWTHROAT	8,716	8,497	3	+	2	+
6820 BELDINGS YELLOWTHT	0	7	0		0	
6821 GROUND CHAT	0	12	0		0	
6830 YELLOW BR CHAT	580	618	0		0	
6840 HOODED WARBLER	404	533	0		0	
6850 WILSONS WARBLER	2,538	2,418	0		1	+
6860 CANADA WARBLER	2,262	2,408	1	+	0	
6870 AMERICAN REDSTART	6,706	6,661	3	+	0	
6880 PAINTED REDSTART	16	2	2	100	0	
6881 FAN-TAILED WARBLER	0	10	0		0	
6882 HOUSE SPARROW	13,854	12,766	46	+	0	
6883 EUR TREE SPARROW	10	21	0		0	
6884 RICEBIRD	24	0	0		0	
6886 JAVA SPARROW	1	0	0		0	
6900 RED FACED WARBLER	0	3	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
6960 YELLOW WAGTAIL	0	7	0		0	
6970 WATER PIPIT	35	10	0		0	
6990 RED THROATED PIPIT	1	0	0		0	
7010 DIPPER	37	112	0		0	
7020 SAGE THRASHER	22	4	0		0	
7030 MOCKINGBIRD	1,183	1,148	7	1	0	
7040 CATBIRD	14,953	14,686	31	+	0	
7050 BROWN THRASHER	1,850	2,016	5	+	0	
7060 LONG BILL THRASHER	21	2	0		0	
7070 CURVE BIL THRASHER	241	119	3	3	0	
7080 BENDIRES THRASHER	1	2	0		0	
7100 CALIF THRASHER	38	40	1	3	0	
7120 CRISSAL THRASHER	22	4	0		0	
7130 CACTUS WREN	135	44	0		0	
7150 ROCK WREN	20	11	0		0	
7170 CANON WREN	7	2	0		0	
7180 CAROLINA WREN	613	1,362	4	+	0	
7190 BEWICKS WREN	367	146	1	1	0	
7210 HOUSE WREN	3,685	4,304	3	+	0	
7220 WINTER WREN	553	997	0		0	
7240 SHORT BILL M WREN	2	41	0		0	
7250 LONG BILL MSH WREN	213	194	0		0	
7260 BROWN CREEPER	2,204	3,049	1	+	0	
7261 RED-BILL LAIOTHRIX	26	0	0		0	
7270 WHITE BR NUTHATCH	1,455	2,095	7	+	1	+
7280 RED BR NUTHATCH	286	1,978	1	+	0	
7290 BRN HEAD NUTHATCH	12	17	0		0	
7300 PIGMY NUTHATCH	31	95	0		0	
7310 TUFTED TITMOUSE	3,117	3,174	13	+	0	
7320 BLACK CR TITMOUSE	183	26	0		0	
7330 PLAIN TITMOUSE	85	87	1	1	0	
7340 BRIDLED TITMOUSE	16	0	0		0	
7350 BLK CAP CHICKADEE	9,681	15,427	28	+	7	+
7355 UNIDENT CHICKADEE	0	34	0		0	
7360 CAROLINA CHICKADEE	1,780	1,745	7	+	0	
7380 MOUNTAIN CHICKADEE	747	1,343	0		0	
7400 BOREAL CHICKADEE	81	69	0		0	
7410 CHEST B CHICKADEE	169	227	0		0	
7420 WRENTIT	187	118	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80: All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
7430 COMMON BUSHTIT	195	150	0		0	
7450 BLACK EAR BUSHTIT	0	1	0		0	
7460 VERDIN	46	30	0		0	
7474 ELEPAIO	46	0	0		0	
7480 GOLDEN CR KINGLET	2,308	5,851	0		0	
7490 RUBY CROWN KINGLET	6,879	14,087	3	+	0	
7510 BLU GRAY GNATCATCH	246	222	1	+	0	
7520 BLK TAIL GNATCATCH	4	1	0		0	
7540 TOWNSEND SOLITAIRE	7	21	0		0	
7550 WOOD THRUSH	2,517	3,148	1	+	0	
7560 VEERY	2,073	2,710	3	+	1	+
7570 GRAY CHEEK THRUSH	1,329	2,189	1	+	0	
7580 SWAINSONS THRUSH	8,673	12,177	4	+	2	+
7590 HERMIT THRUSH	3,621	4,897	3	+	0	
7610 ROBIN	9,318	10,376	70	1	2	+
7612 FIELDFARE	0	1	0		0	
7615 CLAY-COLORED ROBIN	0	150	0		0	
7621 HAWAIIAN THRUSH	28	0	0		0	
7630 VARIED THRUSH	36	48	0		0	
7640 BLUETHROAT	9	0	0		0	
7660 EASTERN BLUEBIRD	5,055	5,535	16	+	0	
7670 WESTERN BLUEBIRD	419	223	0		0	
7680 MOUNTAIN BLUEBIRD	1,484	1,762	4	+	0	
8045 P R SCREECH OWL	0	3	0		0	
8071 STREAMER T HUMMBRD	2	0	0		0	
8080 PUERTO RICAN TODY	0	2	0		0	
8092 LOGHEAD FLYCATCHER	0	1	0		0	
8093 STOLID FLYCATCHER	1	3	0		0	
8094 SAD FLYCATCHER	0	1	0		0	
8097 GREAT ANTILN PEWEE	0	5	0		0	
8113 BAHAMA MOCKINGBIRD	5	3	0		0	
8115 PEARL-EYE THRASHER	68	0	0		0	
8124 RED LEGGED THRUSH	10	2	0		0	
8130 THICK BILL VIREO	49	19	0		0	
8145 BAHAMA YELLOW THRT	8	7	0		0	
8151 ORANGEQUIT	0	4	0		0	
8155 STRIPED-HD TANAGER	9	30	0		0	
8161 GLOSSY COWBIRD	657	28	0		0	
8162 GR ANTILN GRACKLE	107	7	0		0	

SPECIES	NUMBER BANDED 1979	NUMBER BANDED 1975	NUMBER ENCOUNTERS '75-BANDED BIRDS PROCESSED THRU AUG '80 All How Obt. Codes Except 89 and 99 Number	%	How Obt. 89 Number	%
8166 TROUPIAL	0	1	0		0	
8174 YEL FACE GRASSQUIT	0	10	0		0	
8178 GR ANT BULLFINCH	0	29	0		0	
8179 P R BULLFINCH	0	1	0		0	
8504 ADELIE PENGUIN	0	83	4	5	0	
8522 GRAY HEAD ALBATROS	0	360	0		0	
8524 L-M SOOTY ALBATROS	0	14	0		0	
8525 GIANT PETREL	253	123	6	5	0	
8537 SNOW PETREL	0	13	0		0	
8541 BLUE EYED CORMORAN	218	0	0		0	
8543 SHEATHBILL	5	116	0		0	
8545 SOUTH POLAR SKUA	118	416	15	4	0	
8546 S BLK BACKED GULL	57	238	2	1	0	
8548 ANTARCTIC TERN	0	91	0		0	
8552 S POLAR X BRN SKUA	0	9	0		0	
8554 BROWN SKUA	19	1	0		0	
TOTAL	1,134,464	1,127,676	36,897	3	3,247	0

POINT REYES BIRD OBSERVATORY
4990 Shoreline Highway, Stinson Beach, CA 94970
Telephone (415) 868-1221

1 June 1981

Dear Bander:

This is a report on the proposed establishment of the Banding Data Analysis Service (BDAS), a centralized storage, retrieval and analysis service for banding data. This report will provide 1) a detailed description of the purpose, operation, estimated cost, and current status of the project, and 2) a questionnaire designed to determine the amount of interest in the project and the quantity of data with which we may be dealing.

The idea of a centralized repository for banding data is certainly not new. The most recent impetus for the establishment of such a repository was initiated by Dr. Stephen Russell, who led a special session on "Increasing the usefulness of data gathered during banding" at the March 1980 meeting of the Western Bird Banding Association in Corpus Christi, Texas. The proposed Banding Data Analysis Service is an outgrowth of that meeting.

I. PURPOSE: We hope to establish a centralized repository and analysis service for North and Middle American bird banding data that is not collected by the Bird Banding Laboratory (BBL), an office of the U.S. Fish and Wildlife Service, or the Canadian Wildlife Service. The BBL, for example is primarily concerned with recoveries of banded birds and collects only the following basic data: band number, species, sex and age, date, and location of banding and recovery. Many individual banders and most major bird observatories customarily collect many additional data including recapture (repeat and return) information, detailed data on weight, fat, molt, reproductive condition, wing length, ectoparasites, etc., and data on netting and/or trapping effort and success. Most banders presently have no facilities or access to facilities to store, sort, index, retrieve, and analyze these data. As a result, these data often accumulate without analysis, presumably until the death of the bander, and then are usually destroyed. What a waste!

The proposed Banding Data Analysis Service (BDAS) could play an extremely important role in achieving a much better utilization of these data. Specifically, it could:

1) store banding data (in computer retrievable form) that is not collected by the BBL or the Canadian Wildlife Service,

2) provide contributing banders with completed USF&WS banding schedules and with an analysis and annual summary of their banding operations including a sorted and indexed listing of their data and some minimal basic statistics, and

3) retrieve banding data and provide it to banders and other researchers upon request.

It is hoped that the BDAS will be of great benefit to the individual banders (and the major bird observatories as well) because it will provide them with a readily accessible means for obtaining an analysis and summary of their banding data. This will not only provide them with a good feel for the population dynamics of the species that they are handling, it will also provide them with much-needed help and encouragement to publish their data. It cannot be overemphasized that return and repeat information is often of greater interest than recoveries of foreign birds.

Furthermore, if the individual bander chooses not to work with his own data, they can then be made available to others for analysis. Indeed, many problems may only be solved by the utilization of data collected over large geographical areas or over long time periods. It is hoped that the BDAS will encourage cooperative projects and analyses among many individual banders and bird observatories. In addition, the BDAS will provide for the permanent storage of the wealth of banding data that is collected annually. In this respect it will provide a major archive for data that will increase in value for generations to come.

II. OPERATION: The Banding Data Analysis Service (BDAS) will:

A. Input and store banding data.

1. Banders will submit a copy of their proofed raw banding data, including all recaptures (repeats and returns) and recoveries. These data will be submitted in either computer-readable form (e.g. magnetic tapes, floppy disks or punched cards) or handwritten form on standardized banding data sheets (see example enclosed). Banders will also submit a copy of their daily banding effort data (net hours, trap hours, and timing) on another standardized data sheet. This latter information is extremely important for the proper analysis of banding data. Both of these data sheets and instructions for their use will be provided by the BDAS.

2. a. The BDAS will acknowledge receipt of the raw data and enter (keypunch) handwritten data into the computer.

b. The BDAS will run these raw data through an update program which will update (or initially create) that bander's archival data file and reject erroneous or inconsistent records.

c. Any rejected records will be run through an error analysis program which will provide corrections and editing instructions (if possible) or questions for the bander to answer.

d. The BDAS will return the raw data to the bander with corrections or questions about any rejected records.

3. The bander will provide the BDAS with answers (if possible) to any such questions.

4. The BDAS will run the corrected records through the update program to correct that bander's archival data file. This file will then be duplicated and stored in two locations.

B. Provide banders with analyses and reports of their banding operations.

1. The BDAS will provide the banders with two copies of completed USF&WS banding schedules for all raw data submitted (one to send to the BBL and one for the bander's own records). These schedules will be provided as soon as the raw banding data are processed.

2. The BDAS will provide banders with an annual report of their banding operations which will include:

a. A computer listing of all of that bander's data, sorted and indexed by species, band number, and date of capture (see enclosed sample).

b. A summary based on his analyzed banding data which will include:

1) His total annual banding effort in terms of total net hours and/or trap hours.

2) His total annual banding success characterized <u>for each species handled</u> as well as for <u>total</u> birds by:

a) The number of birds newly banded during the year and this number per 100 net and/or trap hours.

b) The number of different individuals handled during the year and this number per 100 net and/or trap hours (includes all newly banded birds, all returns, and all recoveries).

c) The total number of captures during the year and this number per 100 net and/or trap hours (includes all newly banded birds and all repeats, returns, and recoveries).

d) The age and sex breakdown (% of AHY-M, AHY-F, AHY-U, HY-M, HY-F, HY-U, etc.) based on a), b), and c) above.

e) The total number of species banded and the total number of species handled.

This summary may also be obtained based on <u>monthly</u>, <u>ten-day</u> and/or <u>five-day</u> periods (for any or all parts of the year). In addition, such special short-period reports could include, <u>for each species</u>, means, ranges, and standard deviations of weight, fat class, body molt class, and wing length. Short-period reports could be provided to the bander on a quarterly basis. An additional report that could be obtained is a <u>daily matrix</u> (in

one-month blocks) of effort (in terms of number of nets and/or trap hours) and success, for each species and for total birds (in terms of number newly banded, number recaptured, and total number handled). This daily matrix could also be provided quarterly.

3. The BDAS will provide banders with an annual report of its total activities. This could include a listing of contributing banders, the total number of records submitted, and a monthly matrix (for all banders combined) of effort (in terms of total net and/or trap hours) and success, for each species and for total birds (in terms of number newly banded, number of different individuals handled, and total number captured). This report may be broken down into geographical regions if there is a sufficient number of contributing banders in any one region.

C. Provide researchers with banding data in response to their requests.

These data will be supplied either in computer-readable form (magnetic tape, floppy disks or punched cards) or as a computer listing. Requests may pertain to single species or to groups of species, but researchers must specify the exact information they require. For example, if one requests information of the weights of *Catharus* thrushes as a function of time of day, time of year, and geographical location, he will not be provided associated information concerning age, sex, fat content, or wing length unless he specifically requests it. The BDAS will also supply a minimal amount of basic statistics (means, ranges, and standard deviations) in response to specific requests for data.

Banders who are analyzing their own data may "flag" any of their records, or any part of any records, and so prevent these flagged data from being provided to other researchers. Flags will automatically expire after five years but will be renewable. Researchers publishing banding data provided by BDAS must agree to 1) acknowledge in print both the use of the data and the bander that provided the data and 2) provide the bander with a reprint or copy of the publication.

III. COST: Three costs need to be considered. The first is the cost of initial development of the BDAS project which will include both overall logistics establishment and software development (computer programming). We hope to obtain funding for this initial development from a combination of grants from the Federal Government and private foundations and from a consortium consisting of the major ornithological societies, banding associations, and bird observatories.

The second is the cost of operating the service, that is, the cost of entering the handwritten data (key punching), of updating and storing the banders' archival data files, of analyzing and summarizing the data, and of issuing the completed USF&WS schedules and the annual reports. We estimate that these costs will amount to about 10¢/record for data received in handwritten form and about 5¢/record for data received in already computer-readable form (magnetic tapes, floppy disks or punched cards). A record consists of all data

taken from a single capture, that is, a single line of variable length but always including the first fifty (50) or so characters of the standardized banding data sheet. While we hope that funding from outside sources will become available to cover part of these operating costs, we feel that the banders themselves will probably have to bear the majority of the operating costs.

The third cost is the cost of retrieving data and of answering requests from researchers. We anticipate that these costs will be borne primarily or entirely by the researchers. The costs will be scaled according to the complexity of the request, the number of records searched, the number of records retrieved, and the type of output requested (computer-readable form or listing).

IV. LOGISTICS: On 27 May 1980 the Board of Directors of the Point Reyes Bird Observatory (PRBO) voted to sponsor the BDAS project. A special account has been established at PRBO, a tax-exempt, non-profit research and educational institution, to handle the finances of the BDAS. Any contribution sent to this account will be fully tax-deductible. A computer capable of handling the entire BDAS is now available and software development is currently underway. We hope the BDAS could begin to process data, on a trial basis, by the fall of 1981 and, on a regular basis, by the fall of 1982.

In closing, it should be noted that the proposed BDAS has the enthusiastic support and endorsement of the Bird Banding Laboratory. When it becomes operable, the BDAS will provide a service to both the bander and the BBL by facilitating the submission of more accurate and timely banding schedules.

We would appreciate it if you would carefully examine this entire proposal, jot down any questions and comments that you may have, complete the enclosed questionnaire, and return it by 1 September 1981 to:

Dr. David F. DeSante
Point Reyes Bird Observatory
4990 Shoreline Highway
Stinson Beach, CA 94970

Thank you very much for your time, interest, and effort.

Sincerely yours,

George Ferkel

for David F. DeSante
Landbird Biologist

enc.

BANDING DATA ANALYSIS SERVICE (BDAS) QUESTIONNAIRE

Name _____

Address _____

_____

Phone (include Area Code) Home: _____ Work: _____

Professional affiliation (if any): _____

PLEASE NOTE: The Banding Data Analysis Service (BDAS) will only accept data submitted either in computer-readable form (e.g. tapes, disks, or punched cards) or in handwritten form on standardized banding data sheets (see example enclosed). These standardized banding data sheets and instructions for their use will be provided by the BDAS. It is anticipated that banders will contribute to the operating costs (about 10¢/record for data submitted in handwritten form, and about 5¢/record for data submitted in computer-readable form).

1. About how many birds do you currently encounter/year (include both new and recapture records)? _____

2. About what % of your current (1981) records are:

   a. In computer-readable form (tapes, disks, or punched cards): _____%

      In what form? _____

   b. Handwritten on standardized banding data sheets? _____%
      (See example enclosed.)

   c. Handwritten on a different computer-compatible data sheet? _____%
      (Please send an example of these data. Thank you.)

   d. In any other form? _____%
      (Please send an example of these data. Thank you.)

3. About how many banding records do you have from previous (prior to 1981) years (include both new and recapture records)? _____

4. About what % of your old (prior to 1981) records are:

   a. In computer-readable form (tapes, disks, or punched cards)? _____%

      In what form: _____

   b. Handwritten on standardized banding data sheets? _____%
      (See example enclosed.)

c. Handwritten on a different computer-compatible data sheet? _____%
(Please send an example of these data. Thank you.)

d. In any other form? _____%
(Please send an example of these data. Thank you.)

5. Are you interested in submitting banding data to the BDAS?

YES _____

NO _____ Please explain _____

_____

_____

6. If YES, please complete the following. I am interested in:

	YES	NO
a. Submitting my current (1981) data that are already in computer-readable form or handwritten on standardized banding data sheets.	_____	_____
b. Transcribing (to standardized banding data sheets) and submitting my current (1981) data.	_____	_____
c. Submitting my old (prior to 1981) data that are already in computer-readable form or handwritten on standardized banding data sheets.	_____	_____
d. Transcribing (to standardized banding data sheets) and submitting my old (prior to 1981) data.	_____	_____
e. Using standardized banding data sheets in 1982 and submitting my future data.	_____	_____

7. Do you anticipate requesting data submitted to the BDAS by other banders?

YES _____ NO _____.

8. Comments and suggestions on this project: _____

_____

_____

_____

_____

Thank you very much.

POINT REYES BIRD OBSERVATORY - BANDING PERMIT 09316
REPORT BY SPECIES

BAND CODE	BAND NUMBER	NAME ABBR	ADU NO.	AGE	HOW	SEX	HOW	WING (MM)	WEIGHT (GM)	RELS STAT	DATE	TIME	LOCATION	FAT	BROOD PATCH	CLOAC PROT.	MOLT	SKULL	ADDITIONAL
2	110134067	GCSP	557.0	1	9			80	36.3	3000	01/25/77	1520	PT	P8					CROWN2MAX
2	110134067	GCSP	557.0	1	9			81	38.4	3000	02/22/77	0930	PT	P8A	T				CROWN2MAX
2	110134067	GCSP	557.0	1	9			79	33.7	3000	02/24/77	1230	PT	P9	T				CROWN2A
2	110134067	GCSP	557.0	1	9			80	34.6	3000	03/03/77	1110	PT	P8	0		0		CROWN2MAX
2	110134067	GCSP	557.0	1	9			78	33.1	3000	03/22/77	0810	PT	P7	T		1		CROWN2MAX
2	110134067	GCSP	557.0	1	1			80	35.1	3000	11/08/77	0830	PT	P8A	T			3	CROWN5
2	110134067	GCSP	557.0	1	1			79	34.2	3000	11/23/77	1150	PT	P9	1				CROWN5
1	110134067	GCSP	557.0	2	2			76	31.0	3000	11/17/76	0900	PT	P9	1			4	
2	110134068	GCSP	557.0	2	1			76	32.8	3000	12/28/76	0830	PT	R1	1			3	CROWN 1
2	110134068	GCSP	557.0	1	9			77	32.2	3000	01/04/77	1010	PT	P9	2				
2	110134068	GCSP	557.0	1	9			77	31.6	3000	02/09/77	0900	PT	P8A	1				CROWN2MIN
2	110134068	GCSP	557.0							3000	02/09/77	1040	PT	P8					
2	110134068	GCSP	557.0	1	9			77	29.0	3000	02/15/77	1610	PT	R3	T				CROWN2MIN
2	110134068	GCSP	557.0	1	9			77	31.2	3000	02/22/77	0950	PT	P8A	T				
2	110134068	GCSP	557.0	1	9			76	28.4	3000	03/01/77	1020	PT	R3	1		0		CROWN2MIN
2	110134068	GCSP	557.0	1	9			76	30.8	3000	03/08/77	1120	PT	P3A	1		0		CROWN2MIN
2	110134068	GCSP	557.0	1	9			76	31.9	3000	03/31/77	1120	PT	R0	1		2		CROWN2MIN
2	110134068	GCSP	557.0	1	9			73	32.6	3000	04/07/77	0800	PT	PHT	1	0	0 3		CROWN2MIN
2	110134068	GCSP	557.0	1	9			73	32.3	3000	04/07/77	0850	PT	PHT	1		3		CROWN2
1	110134073	GCSP	557.0					79	28.2	3000	11/22/76	1000	PT	U10	T			3	CROWN 2
2	110134073	GCSP	557.0	1	9			77	30.2	3000	01/06/77	1140	PT	U7	1				CROWN 2MIN
2	110134073	GCSP	557.0	1	9			77	31.6	3000	02/03/77	1740	PT	U5	1				CROWN2MIN
2	110134073	GCSP	557.0	1	9			79	29.3	3000	02/17/77	1400	PT	U10	1				CROWN2MIN
2	110134073	GCSP	557.0					78	30.1	3000	12/08/77	0910	PT	U9	1			3	CROWN2MAX
1	110134074	GCSP	557.0	2	2			76	25.8	3000	11/22/76	1000	PT	U15	0			4	
1	110134075	GCSP	557.0	2	2			77	30.0	3000	11/22/76	1020	PT	U16	1			2	
2	110134075	GCSP	557.0	1	9			77	30.5	3000	02/03/77	1600	PT	U16	1				CROWN2MIN
2	110134075	GCSP	557.0	1	9			77		3000	04/05/77	0750	PT	U20	T	0	0 0		CROWN2MIN
2	110134075	GCSP	557.0						31.4	3000	04/05/77	1050	P2	U21					
2	110134075	GCSP	557.0	1	1			77	34.2	3000	05/03/77	0910	PT	U6	3	0	0 0		CROWN5A-C
1	110134076	GCSP	557.0					76	30.3	3000	11/22/76	1050	PT	U7	1			3	CROWN 3
2	110134076	GCSP	557.0	1	9			76	33.5	3000	01/20/77	1120	PT	U6	1				CROWN5B
2	110134076	GCSP	557.0	6	1			76	32.2	3000	02/03/77	1630	PT	U21	1				CROWN4+
2	110134076	GCSP	557.0	1	9			75	30.4	3000	04/05/77	1010	PT	U6	1		2		CROWN3MAX
1	110134077	GCSP	557.0	2	2			.75	29.5	3000	11/23/76	1120	PT	U6	T			2	CROWN 2
1	110134081	GCSP	557.0	2	1			80	36.5	3000	11/24/76	1200	PT	R3	1			3	CROWN 2
1	110134081	GCSP	557.0	2	2			79											

STATION

PERMIT 1 ... 5

NEW 1, RECAP 2, FOREIGN 3, DESTROY 4, REBAND 5

U 0 SY 5, L 4 [illegible] 6, HY 2 7, AHY 1 ATY 8

0 4, 0 5, U 0

PLUM. 1 BR P 6, SKULL 2 BILL/MO 7, EYE 3 WEIGHT 8, WNG LTH 4 OTHER 9, CLO PR 5

USE DASH FOR DATA NOT TAKEN

NONE 0, LIGHT SMALL 1, MEDIUM 2, HEAVY, LARGE 3

BAND SIZE ____ DATES ____ TO ____

NOTES/SPECIES	BANDER CODE	BAND	SP CODE	A O U	AGE	HOW	SEX	HOW	WING	WEIGHT	STATUS	DATE M	D	Y	TIME	LOC	SITE	FAT	BR P. CL P.	MOLT	PIN	PIG	SEC	DEK	SKUL	ADDITIONAL DATA
	6	10		20					30		40				50				60						70	80

BANDERS _____, _____, _____, _____, _____

PRBO 77-1