

**APPENDIX B (FILE STRUCTURES)**

**AND**

**APPENDIX C (CODE DEFINITIONS)**

**TO**

**THE MAPS ANALYTICAL MANUAL**

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The database file structures and code definitions included in these two appendices are as follows:

### APPENDIX B: DATABASE FILE STRUCTURES

#### STRUCTURES:

BNSTRU.DBF  
SPECIES.DBF  
SNSTRU.DBF  
EFFSTRU.DBF  
CNTRL.DBF  
STATIONS.DBF

### APPENDIX C: DATABASE CODE DEFINITIONS

Code Definitions of MAPS Banding Data  
Code Definitions of MAPS Effort Data  
Code Definitions of MAPS Breeding Status Data  
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Code Definitions of STATIONS.DBF

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\*\* BNSTRU.DBF is the structure for the banding database.

Structure for database: B<sta>N<yr>.DBF

Field	Field Name	Type	Width	Dec	Index
1	LOC	Character	4		N
2	BS	Character	2		N
3	PG	Character	3		N
4	C	Character	1		N
5	OBAND	Character	9		N
6	BAND	Character	9		N
7	NUM	Character	3		N
8	OSP	Character	4		N
9	SPEC	Character	4		N
10	OA	Character	1		N
11	OHA	Character	2		N
12	AGE	Character	1		N
13	HA	Character	2		N
14	OS	Character	1		N
15	OHS	Character	2		N
16	SEX	Character	1		N
17	HS	Character	2		N
18	SK	Character	1		N
19	CP	Character	1		N
20	BP	Character	1		N
21	F	Character	1		N
22	BM	Character	1		N
23	FM	Character	1		N
24	FW	Character	1		N
25	JP	Character	1		N
26	WNG	Numeric	3		N
27	WEIGHT	Numeric	5	1	N
28	STATUS	Character	3		N
29	DATE	Date	8		N
30	TIME	Character	3		N
31	STA	Character	3		N
32	STATION	Character	4		N
33	ONET	Character	4		N
34	NET	Character	2		N
35	DISP	Character	1		N
36	NOTE	Character	2		N
37	PPC	Character	1		N
38	SSC	Character	1		N
39	PPF	Character	1		N
40	SSF	Character	1		N
41	TT	Character	1		N
42	RR	Character	1		N
43	HD	Character	1		N
44	UPP	Character	1		N
45	UNP	Character	1		N
46	NF	Character	1		N
47	SC	Character	1		N
48	CC	Character	1		N
49	BC	Character	1		N
50	MC	Character	1		N
51	WC	Character	1		N
52	JC	Character	1		N
53	OV1	Character	2		N
54	V1	Character	2		N

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55	VM	Character	2	N
56	V94	Character	2	N
57	V95	Character	2	N
58	V96	Character	2	N
59	V97	Character	2	N
60	OVYR	Character	2	N
61	VYR	Character	2	N
62	N	Character	1	N
63	B	Character	1	N
64	A	Character	1	N
**	Total	**	135	

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\*\* SNSTRU.DBF is the structure for the breeding status database.

Structure for database: S<sta>N<yr>.DBF

Field	Field Name	Type	Width	Dec	Index
1	LOC	Character	4		N
2	STA	Character	3		N
3	STA2	Character	4		N
4	STATION	Character	4		N
5	NUM	Character	3		N
6	SPEC	Character	5		N
7	BS89	Character	1		N
8	BS90	Character	1		N
9	BS91	Character	1		N
10	BS92	Character	1		N
11	BS93	Character	1		N
12	BS94	Character	1		N
13	BS95	Character	1		N
14	BS96	Character	1		N
15	BS97	Character	1		N
16	BS98	Character	1		N
17	BRSTAT	Character	10		N
18	B89	Character	1		N
19	B90	Character	1		N
20	B91	Character	1		N
21	B92	Character	1		N
22	B93	Character	1		N
23	B94	Character	1		N
24	B95	Character	1		N
25	B96	Character	1		N
26	B97	Character	1		N
27	B98	Character	1		N
**	Total	**	54		

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\*\* EFSTRU.DBF is the structure for the effort database.

Structure for database: <sta>EF<yr>.DBF

Field	Field Name	Type	Width	Dec	Index
1	LOC	Character	4		N
2	STA	Character	3		N
3	DATE	Date	8		N
4	IP	Character	2		N
5	SP	Character	1		N
6	NET	Character	2		N
7	LENGTH	Numeric	4	2	N
8	START1	Character	3		N
9	END1	Character	3		N
10	START2	Character	3		N
11	END2	Character	3		N
12	MAN	Character	1		N
13	MA	Character	1		N
14	MB	Character	1		N
15	N	Character	1		N
16	E	Character	1		N
**	Total	**	42		

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\*\* CNTRL98.DBF is the database that contains the determinations of what analysis can be done on each year of data.

Structure for database: CNTRL98.DBF

Field	Field Name	Type	Width	Dec	Index
1	REGION	Character	1		N
2	STA	Character	3		N
3	STA2	Character	4		N
4	STATION	Character	4		N
5	LOC	Character	4		N
6	ELEV	Numeric	4		N
7	STATE	Character	2		N
8	GEOSTRT	Character	2		N
9	ACTSTRT	Character	2		N
10	D89	Character	1		N
11	D90	Character	1		N
12	D91	Character	1		N
13	D92	Character	1		N
14	D93	Character	1		N
15	D94	Character	1		N
16	D95	Character	1		N
17	D96	Character	1		N
18	D97	Character	1		N
19	D98	Character	1		N
20	SPACE	Character	1		N
**	Total	**	38		

\*\* STATIONS.DBF contains the descriptive information about each station. This includes lat.-long. information, operators' names, addresses, phone numbers, etc., as well as what year the station operated in, etc.

Structure for database: STATIONS.DBF

Field	Field Name	Type	Width	Dec	Index
1	FIRSTNAME	Character	16		N
2	LASTNAME	Character	17		N
3	TITLE	Character	34		N
4	AD1	Character	30		N
5	AD2	Character	30		N
6	AD3	Character	30		N
7	CITY	Character	30		N
8	ST	Character	2		N
9	ZIP	Character	10		N
10	COUNTRY	Character	6		N
11	WORKPHONE	Character	19		N
12	HOMEPHONE	Character	12		N
13	FAX	Character	18		N
14	EMAIL	Character	48		N
15	LABEL	Character	1		N
16	FUNDER	Character	66		N
17	FEDERAL	Character	5		N
18	REGION	Character	1		N
19	STRATUM	Numeric	2		N
20	STA	Character	3		N
21	LOC	Character	4		N
22	STATION	Character	4		N
23	NAME	Character	25		N
24	NEARTOWN	Character	24		N
25	COUNTY	Character	23		N
26	STATE	Character	2		N
27	BLOCK	Character	8		N
28	LATITUDE	Character	7		N
29	LONGITUDE	Character	9		N
30	PRECISION	Character	3		N
31	STA2	Character	4		N
32	ELEV	Numeric	4		N
33	BBA	Character	1		N
34	REGISTERED	Character	1		N
35	WAIVER	Character	1		N
36	MAP	Character	1		N
37	VISITED	Character	2		N
38	PHAB	Character	2		N
39	SHAB	Character	2		N
40	HABITAT	Character	33		N
41	STAGE	Character	2		N
42	D89	Character	1		N
43	D90	Character	1		N
44	D91	Character	1		N
45	D92	Character	1		N
46	D93	Character	1		N
47	D94	Character	1		N
48	D95	Character	1		N
49	Y96	Character	1		N
50	D96	Character	1		N
51	Y97	Character	1		N

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52	D97	Character	1	N
53	Y98	Character	1	N
54	D98	Character	1	N
55	Y99	Character	1	N
56	Y00	Character	1	N
57	HISTORY	Character	11	N
**	Total	**	569	

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\*\* The SPECIES.DBF is a listing of BBS sequence numbers, four-letter alpha codes, and species names for species in banding, point count and breeding status data.

<u>BBS#</u>	<u>SPEC</u>	<u>SPECIES</u>
003	COLO	Common Loon
006	PBGR	Pied-billed Grebe
069	DCCO	Double-crested Cormorant
078	AMBI	American Bittern
080	GBHE	Great Blue Heron
081	GREG	Great Egret
084	SNEG	Snowy Egret
085	LBHE	Little Blue Heron
088	CAEG	Cattle Egret
089	GRHE	Green Heron
104	TRUS	Trumpeter Swan
115	CAGO	Canada Goose
117	WODU	Wood Duck
118	AGWT	American Green-winged Teal
121	ABDU	American Black Duck
123	MALL	Mallard
131	CITE	Cinnamon Teal
133	GADW	Gadwall
137	CANV	Canvasback
138	REDH	Redhead
142	LESC	Lesser Scaup
148	HARD	Harlequin Duck
153	COGO	Common Goldeneye
155	BUFF	Bufflehead
157	HOME	Hooded Merganser
158	COME	Common Merganser
163	TUVU	Turkey Vulture
165	OSPR	Osprey
171	BAEA	Bald Eagle
175	SSHA	Sharp-shinned Hawk
176	COHA	Cooper's Hawk
177	NOGO	Northern Goshawk
178	UNAC	Unidentified Accipiter
180	HRSH	Harris' Hawk
182	RSHA	Red-shouldered Hawk
183	BWHA	Broad-winged Hawk
185	SWHA	Swainson's Hawk
189	RTHA	Red-tailed Hawk
194	GOEA	Golden Eagle
196	AMKE	American Kestrel
197	MERL	Merlin
200	PRFA	Prairie Falcon
201	PLCH	Plain Chachalaca
210	RPHE	Ring-necked Pheasant
212	SPGR	Spruce Grouse
213	BGSE	Blue Grouse
214	WIPT	Willow Ptarmigan
217	RUGR	Ruffed Grouse
222	WITU	Wild Turkey
224	NOBO	Northern Bobwhite
225	SCQU	Scaled Quail
227	GAQU	Gambel's Quail
228	CAQU	California Quail

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229	MOUQ	Mountain Quail
234	CLRA	Clapper Rail
236	VIRA	Virginia Rail
237	SORA	Sora
245	AMCO	American Coot
248	SACR	Sandhill Crane
263	KILL	Killdeer
272	GRYE	Greater Yellowlegs
273	LEYE	Lesser Yellowlegs
277	SOSA	Solitary Sandpiper
282	SPSA	Spotted Sandpiper
284	UPSA	Upland Sandpiper
325	COSN	Common Snipe
328	AMWO	American Woodcock
330	RNPH	Red-necked Phalarope
337	LAGU	Laughing Gull
343	UNGU	Unidentified gull
344	MEGU	Mew Gull
345	RBGU	Ring-billed Gull
347	HERG	Herring Gull
356	GBBG	Great Black-backed Gull
363	CATE	Caspian Tern
364	ROYT	Royal Tern
368	COTE	Common Tern
371	FOTE	Forster's Tern
380	UNTE	Unidentified tern
390	MAMU	Marbled Murrelet
405	RODO	Rock Dove
409	BTPI	Band-tailed Pigeon
410	RITD	Ringed Turtle-Dove
413	WWDO	White-winged dove
415	MODO	Mourning Dove
417	INDO	Inca Dove
418	COGD	Common Ground-Dove
420	WTDO	Wing-tipped Dove
432	BBCU	Black-billed Cuckoo
433	YBCU	Yellow-billed Cuckoo
435	GRRO	Greater Roadrunner
437	GBAN	Groove-billed Ani
441	EASO	Eastern Screech-Owl
442	WESO	Western Screech-Owl
444	GHOW	Great Horned Owl
447	NOPO	Northern Pygmy-Owl
448	FEPO	Ferruginous Pygmy-Owl
449	ELOW	Elf Owl
450	BUOW	Burrowing Owl
452	BDOW	Barred Owl
453	GGOW	Great Gray Owl
454	LEOW	Long-eared Owl
455	SEOW	Short-eared Owl
456	BOOW	Boreal Owl
457	NSWO	Northern Saw-whet Owl
458	LENI	Lesser Nighthawk
459	CONI	Common Nighthawk
462	COPO	Common Poorwill
463	CWWI	Chuck-will's-widow
465	WPWI	Whip-poor-will
467	BLSW	Black Swift

469	CHSW	Chimney Swift
470	VASW	Vaux's Swift
474	WTSW	White-throated Swift
476	UNHU	Unidentified hummingbird
478	BBLH	Broad-billed Hummingbird
482	BUFH	Buff-bellied Hummingbird
483	VCHU	Violet-crowned Hummingbird
484	BLUH	Blue-throated Hummingbird
485	MAHU	Magnificent Hummingbird
488	RTHU	Ruby-throated Hummingbird
489	BCHU	Black-chinned Hummingbird
490	ANHU	Anna's Hummingbird
491	COHU	Costa's Hummingbird
492	CAHU	Calliope Hummingbird
493	UNSA	Unidentified sapsucker
494	BTLH	Broad-tailed Hummingbird
495	RUHU	Rufous Hummingbird
496	ALHU	Allen's Hummingbird
498	RNSA	Red-naped Sapsucker
500	BEKI	Belted Kingfisher
501	GKIN	Green Kingfisher
502	LEWO	Lewis' Woodpecker
503	RHWO	Red-headed Woodpecker
504	ACWO	Acorn Woodpecker
505	GIWO	Gila Woodpecker
506	GFWO	Golden-fronted Woodpecker
507	RBWO	Red-bellied Woodpecker
508	YBSA	Yellow-bellied Sapsucker
509	RBSA	Red-breasted Sapsucker
510	WISA	Williamson's Sapsucker
511	LBWO	Ladder-backed Woodpecker
512	NUWO	Nuttall's Woodpecker
513	DOWO	Downy Woodpecker
514	HAWO	Hairy Woodpecker
515	STWO	Strickland's Woodpecker
516	RCWO	Red-cockaded Woodpecker
517	WHWO	White-headed Woodpecker
518	TTWO	Three-toed Woodpecker
519	BBWO	Black-backed Woodpecker
520	FLIN	Flicker Intergrade
520	YSFL	Yellow-shafted Flicker
520	RSFL	Red-shafted Flicker
523	GIFL	Gilded Flicker
524	PIWO	Pileated Woodpecker
526	OSFL	Olive-sided Flycatcher
528	WEWP	Western Wood-Pewee
529	EAWP	Eastern Wood-Pewee
530	YBFL	Yellow-bellied Flycatcher
531	ACFL	Acadian Flycatcher
534	TRFL	Traill's Flycatcher
534	WIFL	Willow Flycatcher
534	SWFL	Southwestern Willow Flycatcher
534	ALFL	Alder Flycatcher
535	LEFL	Least Flycatcher
536	HAFL	Hammond's Flycatcher
537	DUFL	Dusky Flycatcher
538	HDFL	Hammond's/Dusky Flycatcher
539	GRFL	Gray Flycatcher

540	PSFL	Pacific-slope Flycatcher
540	WEFL	Western Flycatcher
540	COFL	Cordilleran Flycatcher
542	UNEM	Unidentified Empidonax
543	BLPH	Black Phoebe
544	EAPH	Eastern Phoebe
545	SAPH	Say's Phoebe
546	VEFL	Vermilion Flycatcher
547	DCFL	Dusky-capped Flycatcher
548	ATFL	Ash-throated Flycatcher
549	GCFL	Great Crested Flycatcher
550	BCFL	Brown-crested Flycatcher
551	GKIS	Great Kiskadee
554	COKI	Couch's Kingbird
555	CAKI	Cassin's Kingbird
557	WEKI	Western Kingbird
558	EAKI	Eastern Kingbird
561	STFL	Scissor-tailed Flycatcher
565	HOLA	Horned Lark
566	PUMA	Purple Martin
570	TRES	Tree Swallow
571	VGSW	Violet-green Swallow
573	NRWS	Northern Rough-winged Swallow
574	BANS	Bank Swallow
575	CLSW	Cliff Swallow
577	BARS	Barn Swallow
579	GRAJ	Gray Jay
580	STJA	Steller's Jay
581	BLJA	Blue Jay
583	GREJ	Green Jay
585	WESJ	Western Scrub-Jay
586	MEJA	Mexican Jay
588	CLNU	Clark's Nutcracker
589	BBMA	Black-billed Magpie
591	AMCR	American Crow
594	FICR	Fish Crow
595	CHIC	Unidentified chickadee
597	CORA	Common Raven
598	BCCH	Black-capped Chickadee
599	CACH	Carolina Chickadee
601	MOCH	Mountain Chickadee
603	BOCH	Boreal Chickadee
604	CBCH	Chestnut-backed Chickadee
605	BRTI	Bridled Titmouse
606	OATI	Oak Titmouse
608	BCTI	Black-crested Titmouse
608	ETTI	Eastern Tufted Titmouse
609	VERD	Verdin
610	BUSH	Bushtit
611	RBNU	Red-breasted Nuthatch
612	WBNU	White-breasted Nuthatch
613	PYNU	Pygmy Nuthatch
614	BHNU	Brown-headed Nuthatch
615	BRCR	Brown Creeper
618	CACW	Cactus Wren
619	ROWR	Rock Wren
620	CANW	Canyon Wren
621	CARW	Carolina Wren

622	BEWR	Bewick's Wren
623	HOWR	House Wren
624	WIWR	Winter Wren
625	SEWR	Sedge Wren
626	MAWR	Marsh Wren
627	AMDI	American Dipper
633	ARWA	Arctic Warbler
634	GCKI	Golden-crowned Kinglet
635	RCKI	Ruby-crowned Kinglet
636	BGGN	Blue-gray Gnatcatcher
637	BTGN	Black-tailed Gnatcatcher
637	CAGN	California Gnatcatcher
644	BLUE	Bluethroat
647	EABL	Eastern Bluebird
648	WEBL	Western Bluebird
649	MOBL	Mountain Bluebird
650	TOSO	Townsend's Solitaire
653	VEER	Veery
654	GCBT	Gray-cheeked Bicknell's Thrush
654	GCTH	Gray-cheeked Thrush
654	BITH	Bicknell's Thrush
655	SWTH	Swainson's Thrush
656	HETH	Hermit Thrush
657	WOTH	Wood Thrush
664	RBRO	Rufous-backed Robin
665	AMRO	American Robin
666	VATH	Varied Thrush
671	WREN	Wrentit
672	GRCA	Gray Catbird
673	NOMO	Northern Mockingbird
675	SATH	Sage Thrasher
676	BRTH	Brown Thrasher
677	LBTH	Long-billed Thrasher
679	CBTH	Curve-billed Thrasher
680	CATH	California Thrasher
681	CRTH	Crissal Thrasher
682	LCTH	LeConte's Thrasher
684	YWAG	Yellow Wagtail
692	AMPI	American Pipit
694	BOWA	Bohemian Waxwing
695	CEDW	Cedar Waxwing
696	PHAI	Phainopela
698	NSHR	Northern Shrike
699	LOSH	Loggerhead Shrike
700	EUST	European Starling
709	WEVI	White-eyed Vireo
710	BEVI	Bell's Vireo
710	LBVI	Least Bell's Vireo
711	BCVI	Black-capped Vireo
712	GRVI	Gray Vireo
713	SOVI	Solitary Vireo
714	YTVI	Yellow-throated Vireo
715	HUVI	Hutton's Vireo
716	WAVI	Warbling Vireo
717	PHVI	Philadelphia Vireo
718	REVI	Red-eyed Vireo
720	BRWA	Brewster's Warbler
721	BWWA	Blue-winged Warbler

722	GWWA	Golden-winged Warbler
723	LAWA	Lawrence's Warbler
724	TEWA	Tennessee Warbler
725	OCWA	Orange-crowned Warbler
726	NAWA	Nashville Warbler
727	VIWA	Virginia's Warbler
728	LUWA	Lucy's Warbler
729	NOPA	Northern Parula
731	YWAR	Yellow Warbler
732	CSWA	Chestnut-sided Warbler
733	MAWA	Magnolia Warbler
734	CMWA	Cape May Warbler
735	BTBW	Black-throated Blue Warbler
736	UYRW	Unidentified Yellow-rumped Warbler
736	MYWA	Myrtle Warbler
736	AUWA	Audubon's Warbler
737	BTYW	Black-throated Gray Warbler
738	TOWA	Townsend's Warbler
739	HEWA	Hermit Warbler
740	BTNW	Black-throated Green Warbler
741	GCWA	Golden-cheeked Warbler
742	BLBW	Blackburnian Warbler
743	YTWA	Yellow-throated Warbler
745	PIWA	Pine Warbler
747	PRAW	Prairie Warbler
748	WPWA	Western Palm Warbler
748	YPWA	Yellow Palm Warbler
749	BBWA	Bay-breasted Warbler
750	BLPW	Blackpoll Warbler
751	CERW	Cerulean Warbler
752	BAWW	Black-and-white Warbler
753	AMRE	American Redstart
754	PROW	Prothonotary Warbler
755	WEWA	Worm-eating Warbler
756	SWWA	Swainson's Warbler
757	OVEN	Ovenbird
758	NOWA	Northern Waterthrush
759	LOWA	Louisiana Waterthrush
760	KEWA	Kentucky Warbler
761	CONW	Connecticut Warbler
762	MOWA	Mourning Warbler
763	MGWA	MacGillivray's Warbler
764	COYE	Common Yellowthroat
766	HOWA	Hooded Warbler
767	WIWA	Wilson's Warbler
768	CAWA	Canada Warbler
769	RFWA	Red-faced Warbler
770	PARE	Painted Redstart
775	YBCH	Yellow-breasted Chat
776	OLWA	Olive Warbler
779	HETA	Hepatic Tanager
780	SUTA	Summer Tanager
781	SCTA	Scarlet Tanager
782	WETA	Western Tanager
784	NOCA	Northern Cardinal
785	PYRR	Pyrrhuloxia
787	RBGR	Rose-breasted Grosbeak
788	BHGR	Black-headed Grosbeak

790	BLGR	Blue Grosbeak
791	LAZB	Lazuli Bunting
792	INBU	Indigo Bunting
793	VABU	Varied Bunting
794	PABU	Painted Bunting
795	DICK	Dickcissel
798	OLSP	Olive Sparrow
799	GTTO	Green-tailed Towhee
800	EATO	Eastern Towhee
801	CALT	California Towhee
802	ABTO	Abert's Towhee
807	BACS	Bachman's Sparrow
808	BOSP	Botteri's Sparrow
811	RCSP	Rufous-crowned Sparrow
812	ATSP	American Tree Sparrow
813	CHSP	Chipping Sparrow
814	CCSP	Clay-colored Sparrow
815	BRSP	Brewer's Sparrow
816	FISP	Field Sparrow
818	BCSP	Black-chinned Sparrow
819	VESP	Vesper Sparrow
820	LASP	Lark Sparrow
821	BTSP	Black-throated Sparrow
822	SAGS	Sage Sparrow
825	SAVS	Savannah Sparrow
826	BAIS	Baird's Sparrow
827	GRSP	Grasshopper Sparrow
828	HESP	Henslow's Sparrow
829	LCSP	Le Conte's Sparrow
830	NSTS	Nelson's Sharp-tailed Sparrow
830	SSTS	Saltmarsh Sharp-tailed Sparrow
830	STSP	Sharp-tailed Sparrow
832	FOSP	Fox Sparrow
833	SOSP	Song Sparrow
834	LISP	Lincoln's Sparrow
835	SWSP	Swamp Sparrow
836	WTSP	White-throated Sparrow
837	GCSP	Golden-crowned Sparrow
838	EWCS	Eastern White-crowned Sparrow
838	GWCS	Gambel's White-crowned Sparrow
838	MWCS	Mountain White-crowned Sparrow
838	NWCS	Nuttall's White-crowned Sparrow
838	PSWS	Puget Sound White-crowned Sparrow
838	WCSP	White-crowned Sparrow
839	HASP	Harris' Sparrow
840	SCJU	Slate-colored Junco
840	UDEJ	Unidentified Dark-eyed Junco
840	ORJU	Oregon Junco
840	GHJU	Gray-headed Junco
847	LALO	Lapland Longspur
853	BOBO	Bobolink
854	RWBL	Red-winged Blackbird
855	TRBL	Tricolored Blackbird
857	EAME	Eastern Meadowlark
858	WEME	Western Meadowlark
859	YHBL	Yellow-headed Blackbird
860	RUBL	Rusty Blackbird
861	BRBL	Brewer's Blackbird

862	GTGR	Great-tailed Grackle
863	BTGR	Boat-tailed Grackle
864	COGR	Common Grackle
865	BROC	Bronzed Cowbird
866	BHCO	Brown-headed Cowbird
867	OROR	Orchard Oriole
868	HOOR	Hooded Oriole
871	AUOR	Audubon's Oriole
872	BUOR	Bullock's Oriole
873	BAOR	Baltimore Oriole
875	SCOR	Scott's Oriole
878	BLRF	Black Rosy-Finch
879	PIGR	Pine Grosbeak
881	PUFI	Purple Finch
882	CAFI	Cassin's Finch
883	HOFI	House Finch
884	RECR	Red Crossbill
885	WWCR	White-winged Crossbill
886	CORE	Common Redpoll
887	HORE	Hoary Redpoll
888	PISI	Pine Siskin
889	LEGO	Lesser Goldfinch
890	LAGO	Lawrence's Goldfinch
891	AMGO	American Goldfinch
897	EVGR	Evening Grosbeak
927	HOSP	House Sparrow
929	FINC	Finch
930	GOOS	Goose
931	SWAL	Swallow
932	WARB	Warbler
933	DUCK	Duck
934	FLYC	Flycatcher
935	SELA	Selasphorus
936	THRU	Thrush
937	HYSA	Hybrid sapsucker
938	SPAR	Sparrow
939	WOOD	Woodpecker
940	BIRD	Bird
941	ORIO	Oriole
942	UOWL	Unidentified owl
943	SWIF	Swift
944	GROU	Grouse
945	HBWA	Hermit/Black-throated Gray Warbler
946	ICTE	Icterine
947	CAVI	Cassin's Vireo
948	CUCK	Cuckoo
949	DHWO	Downy/Hairy Woodpecker
950	EGRE	Egret
951	HERO	Heron
952	TANA	Tanager
953	HAWK	Hawk
954	ARCH	Archilochus
955	UNWR	Unidentified wren
956	THWH	Townsend's/Hermit Warbler hybrid
957	CROW	Crow
958	VIRE	Vireo
959	VULT	Vulture
960	BUTE	Buteo

*APPENDIX B*

961	BBOH	Baltimore/Bullock's Oriole hybrid
962	SPTO	Spotted Towhee
963	CANT	Canyon Towhee
964	BHVI	Blue-headed Vireo
965	PLVI	Plumbeous Vireo
966	JUTI	Juniper Titmouse
967	ILBH	Indigo/Lazuli Bunting hybrid
968	DUWA	Dusky Warbler
969	NUFL	Nutting's Flycatcher

**Code Definitions of 1998 MAPS Banding Data**

Revised January 13, 1999

Each banding record includes (if applicable): a) a band number; b) species determination; c) age and sex; d) how aged and sexed; e) date, time, station and net of each capture; and f) physical information such as degree of skull pneumaticization, degree of breeding condition, some plumage characteristics, etc.. Supplementary information such as the original determinations of species, age, sex, etc. (if these determinations were altered during the verification procedures) and verification codes are also included for each record.

1. LOC: four-character location code (identifies national forest, national park, military installation or other location where a cluster of stations, or single station is located and is run by a single operator). Location codes are unique.
2. BS: Data sheet on which record was recorded:
  - New captures: band size
  - Recaptures: "R"
  - Unbanded birds: "U"
3. PG: page number of raw data sheet for that band size (or recaptures or unbanded) on which the record was written
4. C: capture code (codes L, D, C, and A indicate records that are not used in any analysis)
  - N - newly banded bird
  - R - recaptured bird
  - U - unbanded bird
  - L - lost band
  - D - destroyed band
  - C - changed band (duplicate recapture record containing the original band number)
  - A - added band (double-banded bird)
5. OBAND: original band number if BAND was subsequently changed during verification (Data-analysis file only)
6. BAND: band number
7. NUM: species sequence number
 

In general, these are old (i.e., obsolete) sequence numbers from the Breeding Bird Survey (BBS). Exceptions are numbers greater than 928 (the highest number in the original BBS sequence), which were created by IBP to handle taxa for which there were no BBS number. Examples of these are recent splits, taxa recognized by the Bird Banding Laboratory (BBL) but not given BBS numbers, and certain birds not identified to species. Some taxa recognized by the BBL and/or BBS were merged with others and given a single species number for analyses. These are

  - 520Northern Flicker (includes Red-shafted, Yellow-shafted, and Intergrade)
  - 534Traill's Flycatcher (includes Alder and Willow)
  - 540Western Flycatcher (includes Pacific-slope and Cordilleran)
  - 608Tufted Titmouse (includes Black-crested and Eastern)
  - 654 Gray-cheeked Thrush (includes Bicknell's and Gray-cheeked)
  - 736Yellow-rumped Warbler (includes Audubon's and Myrtle)
  - 748Palm Warbler (includes Western Palm and Yellow Palm)
  - 838White-crowned Sparrow (includes Gambel's, Nuttall's, Puget Sound, Mountain and Eastern)
  - 840Dark-eyed Junco (includes Slate-colored, Oregon, White-winged, Gray-headed, Pink-sided and Unidentified)

8. OSP: original species alpha code if SPEC was subsequently changed during verification

9. SPEC: species alpha code  
In general, these conform to the coding system used by the BBL, which reflects AOU taxonomy as closely as possible. Exceptions are gallinaceous species, for which BBS codes are used, and certain taxa not identified to species, for which codes were created by IBP(records with these species determinations should not be banded, unless proper permits are available).
10. OA: original age if AGE was subsequently changed during verification
11. OHA: original how-aged codes if HA was subsequently changed during verification
12. AGE: age (final determination)  
 4 - local (young bird incapable of sustained flight)  
 2 - hatch-year bird  
 1 - after-hatch-year bird  
 5 - second-year bird  
 6 - after-second-year bird  
 7 - third-year bird  
 8 - after-third-year bird  
 0 - indeterminable age  
 9 - unattempted age
13. HA: how aged  
 S - skull pneumaticization  
 B - brood patch  
 C - cloacal protuberance  
 P - plumage (exact plumage not specified)  
 J - juvenal plumage  
 E - eye color  
 F - flight feather wear  
 M - molt  
 I - mouth\bill  
 O - other (requires explanation in notes)  
 R - recapture information from between-record verification  
 U - used by IBP when HA is not provided or cannot be assessed from supplemental data
14. OS: original sex determination if SEX was subsequently changed during verification (Data-analysis file only)
15. OHS: original how-sexed codes if HS was subsequently changed during verification (Data-analysis file only)
16. SEX: sex (final determination)  
 M - male  
 F - female  
 U - unknown  
 X - unattempted

17. HS: how sexed  
B - brood patch  
C - cloacal protuberance  
P - plumage  
E - eye color  
I - mouth\bill  
O - other (requires explanation in notes)  
T - tail length  
W - wing chord  
R - recapture information from between-record verification  
U - used by IBP when HS is not provided or cannot be assessed from supplemental data
18. SK: skull pneumaticization  
0 - none  
1 - trace (less than 5%)  
2 - less than 1/3 but greater than 5%  
3 - half (1/3 to 2/3)  
4 - greater than 2/3 but less than 95%  
5 - almost complete (greater than 95%)  
6 - complete  
8 - undeterminable, but attempted
19. CP: cloacal protuberance  
0 - none  
1 - small  
2 - medium  
3 - large
20. BP: brood patch  
0 - none  
1 - smooth (feathers lost)  
2 - vascularized  
3 - heavy (very heavily vascularized)  
4 - wrinkled  
5 - molting (growing new feathers)
21. F: fat content  
0 - none  
1 - trace (furculum less than 5% filled)  
2 - light (furculum greater than 5% but less than 1/3 filled)  
3 - half (furculum 1/3 to 2/3 filled)  
4 - full (furculum greater than 2/3 filled but not bulging)  
5 - bulging  
6 - greatly bulging  
7 - very excessive
22. BM: body molt  
0 - none  
1 - trace  
2 - light  
3 - medium  
4 - heavy



23. FM: flight feather molt  
N - no flight feather molt  
A - asymmetric  
S - symmetric  
J - juvenal flight feather growth
24. FW: flight feather wear (outer 4-5 primaries only)  
0 - none  
1 - slight  
2 - light  
3 - moderate  
4 - heavy  
5 - excessive
25. JP: extent of juvenal plumage (body plumage only)  
3 - full juvenal plumage  
2 - greater than ½ juvenal plumage but not full  
1 - less than ½ juvenal plumage but some remaining  
0 - none, completely molted into basic plumage
26. WNG: wing chord (mm)
27. WEIGHT: mass of bird (g)
28. STATUS: status and additional information codes (see North American Bird Banding Manual (Vol. 1) for additional codes)  
000 - not banded or bird died prior to release  
300 - healthy bird banded and released  
301 - healthy bird color-banded and released  
500 - injured bird banded and released  
501 - injured bird color-banded and released
29. DATE: date of capture (MM/DD/YR)
30. TIME: time of beginning the net run in which the bird was captured (to nearest ten minutes, e.g., 7:32 am=073, 24-hr clock)
31. STA: station number
32. STATION: four-character station code
33. ONET: up to 4-character original net designation (net in which bird was captured)
34. NET: 2-character numeric net designation used in analysis

35. DISP: disposition of birds upon release or after capture  
 O - old (healed) injury  
 M - malformed (deformity such as crossed mandibles)  
 W - wing injury  
 L - leg injury  
 T - tongue injury  
 E - eye injury  
 B - body injury  
 I - Illness/infection/disease  
 S - stress or shock  
 P - Predation (death due to predation)  
 D - dead (death due to causes other than predation or removed permanently from station)  
 " " - blank; bird released alive, uninjured
36. NOTE: designates if a note was written on the reverse of the banding sheet  
 N - note  
 #1-27 - note number  
 NM - Not MAPS: record not from a MAPS station or a MAPS net  
 " " - blank; no note
37. PPC: age class of bird indicated by feather generations present in the primary coverts  
 1 - tract is not indicative of a specific adult age class  
 5 - tract contains some or all retained juvenal feathers, indicating a second-year bird  
 6 - tract contains no retained juvenal feathers (or few juvenal feathers in non-passerines),  
 indicating an after-second-year bird  
 7 - tract contains few retained juvenal feathers, indicating a third-year bird  
 8 - tract contains no retained juvenal feathers, indicating an after-third-year bird
38. SSC: age class of bird indicated by feather generations present in the secondary coverts  
 Codes as for PPC
39. PPF: age class of bird indicated by feather generations present in the primaries  
 Codes as for PPC
40. SSF: age class of bird indicated by feather generations present in the secondaries, not including tertials  
 Codes as for PPC
41. TT: age class of bird indicated by feather generations present in the tertials  
 Codes as for PPC
42. RR: age class of bird indicated by feather generations present in the rectrices, excluding central pair  
 Codes as for PPC
43. HD: age class of bird indicated by feather generations present in the head feathers (forehead; crown; nape;  
 supercilium; eye ring; eye line; auricular; subauricular, submoustachial and malar stripes; and lores).  
 Codes as for PPC
44. UPP: age class of bird indicated by feather generations present in the feathers of the upperparts (back,  
 scapulars, rump, and uppertail coverts)  
 Codes as for PPC

45. UNP: age class of bird indicated by feather generations present in the feathers of the underparts (chin, throat, breast, belly, sides, flanks, and undertail coverts)  
Codes as for PPC
46. NF: age class of bird indicated by non-feather characteristics, including bill, mouth, eye, legs, and feet  
1 - non-feather parts not indicative of a specific adult age class  
5 - non-feather parts show some retained juvenal characteristics, indicating a second-year bird  
6 - non-feather parts show no retained juvenal characteristics, indicating an after-second-year bird
47. SC: skull check (if code present, record was re-examined for accuracy)  
U - skull suggests age unknown, but age determined  
Y - skull suggests HY bird, but AGE not equal to 2 or 4  
A - skull suggests adult bird, but AGE not equal to 1, 5 or 6  
5 - SK=5, record re-examined  
" " - blank, record OK, not re-examined
48. CC: cloacal protuberance check (if code present, record was re-examined for accuracy), arranged hierarchically  
A - CP suggests adult, but AGE not equal to 1, 5 or 6  
M - CP suggests male, but SEX not equal to M  
U - SEX=M, but CP is blank  
1 - CP=1, record re-examined  
H - AGE=0, 2 or 4, but SEX=M  
P - SEX=M, but CP=0  
" " - blank; record OK, not re-examined
49. BC: brood patch check (if code present, record was re-examined for accuracy), arranged hierarchically  
A - BP suggests adult, but AGE not equal to 1, 5 or 6  
F - BP suggests female, but SEX not equal to F  
U - Pre-1997: SEX=F, but BP=" " or BP<>3 in species in which males develop BPs  
U - 1997+: only used when SPEC=WREN and SEX=F; sex should probably = U  
5 - BM>2 and BP=5, record re-examined  
H - AGE=0, 2, or 4, but SEX=F  
P - SEX=F, but BP=0  
1 - BP=1 or 5, record re-examined  
" " - blank; record OK, not re-examined
50. MC: molt check (if code present, record was re-examined for accuracy)  
A - FM suggests adult, but AGE not equal to 1, 5 or 6  
Y - BM+FM suggest HY, but AGE not equal to 2 or 4  
" " - blank; record OK, not re-examined
51. WC: flight feather wear check (if code present, record was re-examined for accuracy)  
A - FW suggests adult, but AGE not equal to 1, 5 or 6  
" " - blank; record OK, not re-examined
52. JC: juvenal plumage check (if code present, record was re-examined for accuracy)  
Y - JP suggests HY, but AGE not equal to 2 or 4  
" " - blank; record OK, not re-examined
53. OV1: original single-year verification code for a given band number if V1 changed during between-record

verification

54. V1: single year verification for a given band number (if code present, record was re-examined for accuracy), arranged hierarchically  
 2 - two records with C=N and the same band number or two records with C=R and the same date, time and net  
 BN - band number discrepancy  
 SP - species discrepancy  
 NM - species sequence number discrepancy  
 A - age discrepancy  
 S - sex discrepancy  
 DL - destroyed/lost band and a captured bird with the same band number  
 ST - station discrepancy  
 SS - status discrepancy  
 " " - blank; record OK, not re-examined
55. VM: multi-year verification through 1993 (if code present, record was re-examined for accuracy)  
 Same codes as V1
56. V94: 1994 multi-year verification (if code present record was re-examined for accuracy)  
 Same codes as V1
57. V95: 1995 multi-year verification (if code present record was re-examined for accuracy)  
 Same codes as V1
58. V96: 1996 multi-year verification (if code present record was re-examined for accuracy)  
 Same codes as V1
59. V97: 1997 multi-year verification (if code present record was re-examined for accuracy)  
 Same codes as V1
60. OVYR: original post-1997 multi-year verification code for a given band number if VYR changed during between-record verification
61. VYR: Post-1997 multi-year verification (if code present record was re-examined for accuracy)  
 Same codes as V1
62. N: codes that designate whether or not the record is to be included in productivity and survivorship analyses  
 The following codes mean record not to be used in productivity or survivorship analyses:  
 S - not caught at MAPS station or in a MAPS net  
 E - part of extremely irregular effort at site  
 D - date outside of MAPS periods  
 T - time outside normal MAPS operation for that station  
 ? - uncertain species identification or band number  
 ! - banded bird originally not identified to species; SPEC contains acceptable species alpha-code and OSP contains the original, unacceptable determination  
 H - hummingbird  
 G - gallinaceous bird  
 U - unbanded bird released alive  
 R - recaptured bird, but no band number recorded  
 The following codes indicate record can be used in productivity and survivorship analyses:  
 - - record examined with current MAPS analytical procedures  
 + - record examined with preliminary MAPS analytical procedures



63. B: comparability to previous year (year Before), using constant-effort analysis  
The following mean records cannot be used in constant-effort productivity analyses:  
B - non-comparable, using net-by-net, hour-by-hour protocol (protocol used subsequent to 1991)  
M - non-comparable using net-by-net, hour-by-hour protocol; constant-effort analyses performed manually  
Y - non-comparable using net-by-net, period-by-period protocol (one protocol used prior to 1992)  
X - non-comparable using period-by-period protocol (another protocol used prior to 1992)  
The following codes mean record can be used in constant-effort productivity analyses:  
- - comparable by B or M protocol  
+ - comparable by Y or X protocol  
The following code means no comparison made:  
\* - no comparison made; constant-effort analyses not completed between this year of operation and the preceding year of operation.  
" " - blank; effort data not available; no comparison with preceding year possible
64. A: comparability to next year (year After), using constant-effort analysis  
Same codes as B (Item 63), except for B, and the following additional codes:  
A - (takes place of B) non-comparable using net-by-net, hour-by-hour protocol  
\* - no comparison made; constant-effort analyses not completed between this year of operation and the following year of operation  
" " - blank; effort data not available; no comparison with following year possible

Code Definitions of 1998 MAPS Effort Data  
Revised January 8, 1999

The information provided by this file includes: a) the dates within each period and sub-period the station was operated; b) which nets were run each day; c) the length of each net; d) the time each net was opened and subsequently closed; e) flags on nets that did not have a single opening and closing time; and f) flags on nets run more often than normal within a sub-period.

1. **LOC:** four character location code (identifies national forest, national park, military installation or other location where all stations use the same band strings)

2. **STA:** station number

3. **DATE:** date the station was run (MM/DD/YR)

4. **IP:** intended period. Period in which the effort was intended to be completed (defined by date), with adjustments for weather and other eventualities.

Period One: May 01 - May 10  
 Period Two: May 11 - May 20  
 Period Three: May 21 - May 30  
 Period Four: May 31 - June 09  
 Period Five: June 10 - June 19  
 Period Six: June 20 - June 29  
 Period Seven: June 30 - July 09  
 Period Eight: July 10 - July 19  
 Period Nine: July 20 - July 29  
 Period Ten: July 30 - August 08  
 Period Eleven: August 09 - August 18  
 Period Twelve: August 19 - August 28  
 Period Ninety-Eight: April 11 - April 20  
 Period Ninety-Nine: April 21 - April 30

5. **SP:** sub-period. Used to designate the multiple days of operation in a period when the station was run (from A-J). The sub-periods are designated in order of: (1) number of net hours; and (2) date.

6. **NET:** 2-character numeric net designation used in analysis, matching the NET designations in the banding data files.

7. **LENGTH:** The length of the net relating to the standardized net length of 12m. Used in the calculation of net hours.

12m = 1.000  
 9m = 0.750  
 6m = 0.500

8. **START1:** The start time of the first net run when the net was opened, to

the nearest ten minutes (i.e. 7:30am=073).

9. END1: The start time of the net run at which the net was closed, to the nearest ten minutes (i.e., 11:30=113).

10. START2: The start time of the net run at which the net was re-opened, after a previous open and close of that net, to the nearest ten minutes.

11. END2: The start time of the net run at which the net was closed after a second opening of that net that day, to the nearest ten minutes.

12. MAN: codes that designate any unusual running of the net that precludes the use of computer programs to determine the comparability of effort between any two years.

B - broken effort. Effort for a net on one day where the hours of effort were broken into two or more time blocks. It involves both start1 and 2 and end1 and 2. (i.e. 060-072, 091-115)

# - divided effort. Effort for a net on multiple days (the number of days are entered into the field) required to make up the full effort for that period and sub-period. (i.e. May 05 060-090, May 06 090-120, Man=2)

E - extra effort. Effort for a MAPS net that was never intended for standard MAPS protocol, but is within the MAPS season.

? - designates that the net, start1 or 2, end1 or 2, lack full information (usually a result of the protocol up to 1992) and must be dealt with manually.

13. MA: a designation (A) for use by the computer that eliminates the use of this data in the programs when comparing it to the year after. The comparability of the data for this net, period, and sub-period must be determined without using computer programs.

14. MB: a designation (B) for use by the computer that eliminates the use of this data in the programs when comparing it to the year before. The comparability of this data must be determined without using computer programs.

15. N: codes that designate whether or not the record is to be included in productivity or survivorship analysis. This field is comparable to the designation in the banding data. Effort marked in the N field is not part of standard MAPS protocol.

S - not a MAPS station or in a MAPS net, but during the MAPS season

E - part of extremely irregular effort at site

D - date outside of MAPS periods, but a MAPS net

T - time outside normal MAPS operation for that station, but a MAPS net and during the MAPS season

16. E: E indicates that the effort in the sub-period is not completely

consistent with how the station was  
season.

run throughout the MAPS

Code Definitions of 1998 MAPS Breeding Status Data  
Revised January 8, 1999

For each species at each station, the file includes a year by year determination of its breeding status and a integrated breeding status code which includes information for all years in which the station was operated. The file also provides information regarding the years during which least one individual of each species was captured, because a species can be determined to be breeding at a station during a given year even if it was not captured.

1. LOC: four character location code (identifies national forest, national park, military installation or other location where a cluster of stations, or single station, is located and is run by a single operator).  
Location codes are unique.

2. STA: station number

3. STA2: super-station number (identifies if the station center is in close enough proximity (within 1350m) to another to be grouped with another for survivorship analyses). The super-station number is the same as STA for single stations and the lowest station number + "S" for groups of two or more stations.

4. STATION: four-character station code. A station is a discrete study area consisting of a number of net sites.  
Station codes are unique within a location.

5. NUM species number

In general, these are old (i.e., obsolete) sequence numbers from the Breeding Bird Survey (BBS).

Exceptions are numbers greater than 928 (the highest number in the original BBS sequence), which were

created by IBP to handle taxa for which there was no BBS number. Examples of these are recent splits, taxa recognized by the Bird Banding

Laboratory (BBL) but not given BBS

numbers, and certain birds not identified to species. Some taxa recognized by the BBL and/or BBS were

merged with others and given a single species number for analyses. These are:

520 - Northern Flicker (includes Red-shafted, Yellow-shafted, and Intergrade)

534 - Traill's Flycatcher (includes Alder and Willow)

540 - Western Flycatcher (includes Pacific-slope and Cordilleran)

608 - Tufted Titmouse (includes Black-crested and Eastern)

654 - Gray-cheeked Thrush (includes Bicknell's and Gray-cheeked)

736 - Yellow-rumped Warbler (includes Audubon's and Myrtle)

748 - Palm Warbler (includes Western Palm and Yellow Palm)

838 - White-crowned Sparrow (includes Gambel's, Nuttall's, Puget Sound, Mountain, and Eastern)

840 - Dark-eyed Junco (includes Slate-colored, Oregon, White-winged, Gray-headed, and Unidentified)

6. SPEC: species alpha code

In general, these conform to the coding system used by the BBL, which reflects AOU taxonomy as closely as possible. Exceptions are gallinaceous species, for which BBS codes are used, and certain taxa not identified to species, for which codes were created by IBP.

7-16. Year Specific Breeding Status codes.

While the annual codes L, B, T, +, and - can occur in different years within a single species record, the single year code M can only occur with another single year code M, E, or - within a single species record, unless long term range expansion or contraction has been documented for that species.

A species need not have been captured at a station in a given year to receive a designation other than -, as species are often not captured in areas in which they breed.

7. BS89: breeding status code for 1989.

B - Breeder (at least one individual was a summer resident at the station)

L - Likely breeder (at least one individual was a suspected summer resident at the station)

T - Transient (within breeding range of species, but no individual of the species was a summer resident at the station)

E - Extralimital breeder (one or more individuals of a species was a summer resident outside of the normal breeding range for that species)

M - Migrant (not within breeding range of species, and not a summer resident)

- - Absent (no evidence of species in data; presumably absent from station during year in question)

? - Unidentified (not identified to species - no breeding status assigned)

\* - Station not run this year

8. BS90: breeding status code for 1990  
Same codes as BS89

9. BS91: breeding status code for 1991  
Same codes as BS89

10. BS92: breeding status code for 1992  
Same codes as BS89

11. BS93: breeding status code for 1993

Same codes as BS89

12. BS94: breeding status code for 1994  
Same codes as BS89

13. BS95: breeding status code for 1995  
Same codes as BS89

14. BS96: breeding status code for 1996  
Same codes as BS89

15. BS97: breeding status code for 1997  
Same codes as BS89

16. BS98: breeding status code for 1998  
Same codes as BS89

17. BRSTAT: final, comprehensive breeding status determination. BRSTAT codes represent the summary status of each species' annual breeding status codes over the range of years over which the MAPS station was operated.

B - Breeder (summer resident or suspected summer resident in all years the station was operated)

U - Usual breeder (summer resident or suspected summer resident for more than ½ of the years the station was operated but not all years)

O - Occasional breeder (summer resident or suspected summer resident for ½ or fewer of the years the station was operated)

T - Transient (station lies within species breeding range but no individual of the species was a summer resident at that station in any year)

M - Migrant (station falls outside of the species breeding range)

? - Unidentified (not identified to species - no breeding status assigned)

18. B89: banding data for 1989. Banding data is cross-referenced to determine species captured in this particular year.

X - Species was captured  
- Species was not captured

19. B90: banding data for 1990  
Same codes as B89

20. B91: banding data for 1991  
Same codes as B89

21. B92: banding data for 1992

Same codes as B89

- 22. B93: banding data for 1993  
Same codes as B89
- 23. B94: banding data for 1994  
Same codes as B89
- 24. B95: banding data for 1995  
Same codes as B89
- 25. B96: banding data for 1996  
Same codes as B89
- 26. B97: banding data for 1997  
Same codes as B89
- 27. B98: banding data for 1998  
Same codes as B89

Code definitions of CNTRL.dbf  
Revised Oct. 2, 1997

1. REGION: MAPS region (1-8)
2. STA: station number
3. STA2: super-station number (identifies if the station is in close enough proximity to another to be grouped with another for survivorship analyses)
4. STATION: four character station code
5. LOC: four character location code (identifies national forest, national park, military installation or other location where all stations use the same band strings)
6. ELEV: the elevation at which the station is located
7. STATE: the state or province in which the station is located
8. GEOSTRT: this designates the period in which the station should begin running for proper MAPS protocol. This start period is designated according to factors affecting the arrival of breeding birds including latitude, location on migration pathway, and elevation.
9. ACTSTRT: the period in which the station actually begins its MAPS operation (on average) each year
- 10 - 18. D<yr>: codes in these fields designate the type of analysis the data from the station can be used for in the designated year. These determinations are made on the basis of the number of periods run throughout the year, which is broken down into adult and young super periods, determined by the geostrt designation.
  - N - the station was not run that year
  - P - the station met the requirements for use in productivity analyses. The station ran a minimum of five complete periods, two in the adult, and two in the young superperiod
  - S - the station met the requirements for use in survivorship analyses. The station ran three complete periods within the time included in the adult superperiod+the first period of the young superperiod.
  - B - the data from the year meets the criteria for both survivorship and productivity analyses
  - X - the data from the year meets the criteria for neither survivorship or productivity analyses
19. TRUN: if the last two periods of operation (Aug. 9-28) are dropped then the data for the year may no longer meet the above minimum criteria. Codes in this field designate any changes in how the

data may be used for a particular year if the last two periods are dropped.

- OK - the station can still be used for both productivity and survivorship analyses for all years
- SAME - the designations for each year did not change with the dropping of the last two periods
- SAM\* - the designations for each year did not change, if a shift was used to allow for attitudinal differences in high snowfall years
- S<yr> - the designation for the data in the year in brackets changed so it can only be used for survivorship analyses if the last two periods are dropped
- S<y1, y2> - the designations changed to survivorship only in more than 1 year, shown in the field
- X<yr> - the designation for the data in the year in brackets changed so it can now be used for neither productivity nor survivorship analyses

Code Definitions of STATIONS.DBF  
Revised May 28, 1998

1. **FIRSTNAME:** operator's first name
2. **LASTNAME:** operator's last name
3. **TITLE:** operator's title within sponsoring organization (if any)
4. **AD1:** first line of operator's mailing address
5. **AD2:** second line (if any) of operator's mailing address
6. **AD3:** third line (if any) of operator's mailing address
7. **CITY:** city of operator's mailing address
8. **ST:** two-character postal code of state, province, or territory of operator's mailing address
9. **ZIP:** operator's zip code
10. **COUNTRY:** 'CANADA' if operator is in Canada; otherwise, blank
11. **WORKPHONE:** operator's work phone number (if any)
12. **HOMEPHONE:** operator's home phone number (if provided)
13. **FAX:** operator's FAX number (if any)
14. **EMAIL:** operator's e-mail address (if any)
15. **LABEL:** 'X' for one station per operator (other than IBP) for generating mailing labels
16. **FUNDER:** source(s) of financial support for operation of station
17. **FEDERAL:** 'X' if station always has received federal funding or first year federal funding was received (if ever)
18. **REGION:** MAPS region (1-8)
19. **STRATUM:** physiographic stratum/province as defined by the Breeding Bird Survey (BBS)
20. **STA:** three-digit station number
21. **LOC:** four-character location code
22. **STATION:** four-character station code

23. **NAME:** name of station
24. **NEARTOWN:** nearest community (straight line)
25. **COUNTY:** county/counties in which the station is/are located (includes parishes, boroughs, independent cities, etc.)
26. **STATE:** two-character postal code for state, province, or territory in which the station is located
27. **BLOCK:** ten-minute block designation, following BBL protocol
28. **LATITUDE:** latitude of station as precisely as known up to nearest ten seconds (DD MM S)
29. **LONGITUDE:** longitude of station as precisely as known up to nearest ten seconds (DDDD MM S)
30. **PRECISION:** level of precision of lat.-long. determination. 'BLK' = 10-minute block, '10M' = 10', '01M' = 01', '10S' = 10"
31. **STA2:** super-station number (identifies whether the station is close enough to another to be grouped with it for survivorship analyses)
32. **ELEV:** average elevation (above mean sea level - amsl) in meters
33. **BBA:** bird-banding association representing the state, province, or territory. 'W' = Western, 'I' = Inland, 'E' = Eastern
34. **REGISTERED:** 'X' if registration form is on file for station
35. **WAIVER:** 'X' if waiver form releasing data for use in MAPS analyses is on file
36. **MAP:** 'X' if current map of station is on file
37. **VISITED:** last year station was visited by IBP staff member or intern
38. **PHAB:** primary habitat type (vegetation structure and composition)
39. **SHAB:** secondary (if any) habitat type (vegetation structure and composition)
40. **HABITAT:** operator's description of habitat(s)
41. **STAGE:** overall successional stage of the station. 'M' = Mature, 'PM' = Primarily mature,

'PS' = Primarily successional, 'S' = Successional

- 42. D89: 'X' if banding data received for 1989
- 43. D90: 'X' if banding data received for 1990
- 44. D91: 'X' if banding data received for 1991
- 45. D92: 'X' if banding data received for 1992
- 46. D93: 'X' if banding data received for 1993
- 47. D94: 'X' if banding data received for 1994
- 48. D95: 'X' if banding data received for 1995
- 49. Y96: 'X' if station believed to have been operated in 1996
- 50. D96: 'X' if banding data received for 1996
- 51. Y97: 'X' if station believed to have been operated in 1997
- 52. D97: 'X' if banding data received for 1997
- 53. Y98: 'X' if station expected to be operated in 1998
- 54. Y99: 'X' if station expected to be operated in 1999
- 55. Y00: 'X' if station expected to be operated in 2000
- 56. HISTORY: year(s) in which the station was operated