Code Definitions of STATIONS.dbf

Revised November 8, 2022

STATIONS.dbf is the administration file that contains general station information. Information incorporated into this file for each station includes a) station identification information; b) details of station location; c) basic habitat information; and, d) history of operation.

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

2. STA: unique five digit station number

3. STA2: super-station number (indicates whether or not the station center is in close enough proximity [within 1350m] to the centers of one or more other stations for them to be grouped together as a super-station for survivorship analyses). The super-station number is the lowest station number + "S" for groups of two or more stations or is represented by six dashes ("------") for ungrouped single stations. Groups of stations for which the proximity of the station centers to one another are not exactly known because of imprecise latitude and longitude coordinates the number is the lowest station number + "?" for groups of two or more stations.

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

5. NAME: name of station

6. LHOLD: land holding. The organization that owns the land the station is located on. The first letter in this field denotes the American federal department or indicates a non-federal owner. The second letter is the specific branch of the federal department.
   - A - United States Department of Agriculture
     - F - Forest Service
     - N - Natural Resources Conservation Service
   - D - United States Department of Defense
     - A - Army
     - C - Coast Guard
     - E - United States Department of Energy (grouped with DoD)
     - G - National Guard
     - M - Marine
     - N - Navy
     - O - Air Force
     - X - Army Corps of Engineers
   - I - United States Department of the Interior
     - B - Bureau of Land Management
     - G - Geological Survey
     - I - Bureau of Indian Affairs
     - P - National Park Service (NP or NRA)
     - R - Bureau of Reclamation
     - W - Fish and Wildlife Service (NWR)
   - O - United States Department of Commerce
   - N - National Oceanic and Atmospheric Administration (NOAA)
   - V - Environmental Protection Agency
   - S - State government
   - C - City or county government
   - P - Private

F - Non-American land holding
C - city or county
D - Department of Defense/military
F - forest service
P - national park
R - private
S - state or province
W - fish and wildlife service
"-"- landholder unknown

7. HOLDCERT: land holding certainty. This is a temporary field in which is noted the certainty of the organization owning the land.
+ - The determination is certain and confirmed with the operator or current GIS map
" " - blank. There is some uncertainty in the determination
? - there is great uncertainty in the determination

8. NEARTOWN: nearest community (straight line) determined from coordinates and a road atlas (typically Rand McNally's)

9. COUNTY: county/counties in which the station is located (includes parishes, boroughs, independent cities, etc.)

10. STATE: two-character postal code for state, province, or territory in which the station is located

11. REGION: MAPS region (1-8)

12. LATITUDE: latitude of station as precisely as known up to nearest second; given as DD MM SS (degrees, minutes, seconds)

13. LONGITUDE: longitude of station as precisely as known up to nearest second; given as DDDD MM SS (degrees, minutes, seconds)

14. PRECISION: level of precision of latitude-longitude determination.
BLK = 10-minute block
10M = 10 minutes
01M = 01 minute
10S = 10 seconds
05S = 5 seconds
01S = 1 second
"-" = no latitude nor longitude information available for this station

15. SOURCE: source of latitude and longitude coordinates.
GIS - GIS program (can include ArcView, ArcMAP, etc)
GPS - hand held GPS unit
Web - Web based mapping program (can include topozone.com, Google Earth, etc)
hard - hard copy map (can include USGS topographic map, county map, etc.)

16. DATUM: The reference point around which latitude and longitude are structured.
NAD27 - North American Datum of 1927 is a datum based on the Clarke ellipsoid of 1866
NAD83 - North American Datum of 1983 is an earth-centered datum based on the Geodetic Reference System of 1980. Considered equivalent to the WGS84 datum for this database.
"-" - (dash) confirmed datum information not available for these coordinates.

17. DECLAT: latitude of station as precisely as known up to nearest second; given as DD.ddddd (decimal degrees) Coordinates are given in datum NAD83 if the datum of the original coordinates are known. Decimal coordinates are also provided for datum unknown original coordinates. The NAD83 field indicates if NAD83 coordinates are provided or not. Missing values are given as 99.99999.

18. DECLNG: longitude station as precisely as known up to nearest second; given as DDDD.ddddd (decimal degrees) Coordinates are given in datum NAD83 if the datum of the original coordinates are known. Decimal coordinates are also provided for datum unknown original coordinates. The NAD83 field indicates if NAD83 coordinates are provided or not. Missing values are given as 999.99999.

19. NAD83: whether the DECLAT and DECLNG coordinates are in datum NAD83 or of unknown datum
    x - coordinates in datum NAD83
    "-" - coordinate datum unknown

20. ELEV: average elevation (above mean sea level - amsl) in meters at which the station is located
    9999= no elevation information available for this station

21. STRATUM: Breeding Bird Survey (BBS) physiographic stratum/province in which station is located as determined from coordinates and maps

22. BCR: Bird Conservation Region in which station is located as determined from coordinates and maps

23. HABITAT: operator's description of habitat(s)

24-65. D<yr> and Y<yr> fields. D<yr> fields indicate the status of the data for the year and Y<yr> fields indicate the status of operation of the station for the year.
    D<yr> - The following codes can be used in any of the D<yr> fields
        X -banding data received for the year
        H - unable to acquire the data from the station operator, but the station was operated in the year
        L - data lost by the station operator, but the station was operated in the year
        P - only partial data available. Not enough for analysis, e.g. no recapture records provided by operator.
    Y<yr> - The following codes can be used in any of the Y<yr> fields
        X -station believed to have been operated in the year
        ? - uncertain if station was operated in the year

24. D89: data received status for 1989

25. D90: data received status for 1990

26. D91: data received status for 1991

27. D92: data received status for 1992

28. D93: data received status for 1993

29. D94: data received status for 1994

30. D95: data received status for 1995

31. D96: data received status for 1996
32. D97: data received status for 1997
33. D98: data received status for 1998
34. D99: data received status for 1999
35. D00: data received status for 2000
36. D01: data received status for 2001
37. D02: data received status for 2002
38. D03: data received status for 2003
39. D04: 'X' if banding data received for 2004
40. D05: 'X' if banding data received for 2005
41. D06: 'X' if banding data received for 2006
42. Y07: station operation status for 2007
43. D07: 'X' if banding data received for 2007
44. Y08: station operation status for 2008
45. D08: 'X' if banding data received for 2008
46. Y09: station operation status for 2009
47. D09: 'X' if banding data received for 2009
48. Y10: station operation status for 2010
49. D10: 'X' if banding data received for 2010
50. Y11: station operation status for 2011
51. D11: 'X' if banding data received for 2011
52. Y12: station operation status for 2012
53. D12: 'X' if banding data received for 2012
54. Y13: station operation status for 2013
55. D13: 'X' if banding data received for 2013
56. Y14: station operation status for 2014
57. D14: 'X' if banding data received for 2014
58. Y15: station operation status for 2015

59. D15: 'X' if banding data received for 2015

60. Y16: station operation status for 2016

61. D16: 'X' if banding data received for 2016

62. Y17: station operation status for 2017

63. D17: 'X' if banding data received for 2017

64. Y18: station operation status for 2018

65. D18: 'X' if banding data received for 2018

66. HISTORY: year(s) in which the station was operated

67. YRSOP: number of years of operation

Structure for STATIONS.dbf

Field	Field Name	Type	Width	Dec
1	LOC	Character	4	
2	STA	Numeric	5	0
3	STA2	Character	6	
4	STATION	Character	4	
5	NAME	Character	25	
6	LHOLD	Character	2	
7	HOLDCERT	Character	2	
8	NEARTOWN	Character	34	
9	COUNTY	Character	23	
10	STATE	Character	2	
11	REGION	Character	1	
12	LATITUDE	Character	8	
13	LONGITUDE	Character	10	
14	PRECISION	Character	3	
15	SOURCE	Character	15	
16	DATUM	Character	5	
17	DECLAT	Numeric	8	5
18	DECLNG	Numeric	10	5
19	NAD83	Character	1	
20	ELEV	Numeric	4	0
21	STRATUM	Numeric	2	0
22	BCR	Numeric	2	0
23	HABITAT	Character	40	
24	D89	Character	1	
25	D90	Character	1	
26	D91	Character	1	
27	D92	Character	1	
28	D93	Character	1	
29	D94	Character	1	
30	D95	Character	1	
31	D96	Character	1	
32	D97	Character	1	
33	D98	Character	1	
34	D99	Character	1	
35	D00	Character	1	
36	D01	Character	1	
37	D02	Character	1	
38	D03	Character	1	
39	D04	Character	1	
40	D05	Character	1	
41	D06	Character	1	
42	Y07	Character	1	
43	D07	Character	1	

44	Y08	Character	1	
45	D08	Character	1	
46	Y09	Character	1	
47	D09	Character	1	
48	Y10	Character	1	
49	D10	Character	1	
50	Y11	Character	1	
51	D11	Character	1	
52	Y12	Character	1	
53	D12	Character	1	
54	Y13	Character	1	
55	D13	Character	1	
56	Y14	Character	1	
57	D14	Character	1	
58	Y15	Character	1	
59	D15	Character	1	
60	Y16	Character	1	
61	D16	Character	1	
62	Y17	Character	1	
63	D17	Character	1	
64	Y18	Character	1	
65	D18	Character	1	
66	HISTORY	Character	25	
67	YRSOP	Numeric	2	0

Code Definitions of MAPS Banding Data for Analysis

Last revised November 8, 2022

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

2. STA: unique station number

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

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. BAND: band number

6. SPN: species number
   A unique sequence number created by the Institute for Bird Populations to place species into the AOS taxonomic order in place corresponding to the file date. American Ornithological Society (AOS; R.T. Chesser, et al., comps.). 2021. Sixty-second supplement to the American Ornithological Society's check-list of North American birds. Ornithology: URL: https://doi.org/10.1093/ornithology/ukab037

7. NUMB: species number
   A sequence number created by the Institute for Bird Populations to place species into taxonomic order according to AOU 2008. Some taxa are merged with others and given a single species number for analyses as the species cannot be reliably separated in the hand. These are:
   - 11475 - Traill's Flycatcher (includes Alder, Willow, and Traill's)
   - 11555 - Western Flycatcher (includes Pacific-slope, Cordilleran, and Western)

8. SPEC: four-letter species alpha code. Four-letter species alpha codes from "Four-letter and six-letter alpha codes for birds recorded from the American Ornithologists' Society check-list"; https://www.birdpop.org/docs/misc/Alpha_codes_tax.pdf

9. AGE: age (final determination)
   - 0 - indeterminable age
   - 4 - local (young bird incapable of sustained flight)
   - 2 - hatching-year bird
   - 1 - after-hatching-year bird

5 - second-year bird
6 - after-second-year bird
7 - third-year bird
8 - after-third-year bird

10. HA: how aged
S - skull pneumaticization
B - brood patch
C - cloacal protuberance
L - presence of two generations of feathers within a feather tract or between two adjacent feather tracts
P - plumage (exact plumage not specified)
A - adult plumage
H - 1st basic plumage
J - juvenal plumage
E - eye color
F - flight feather wear
M - active molt occurring
I - mouth\bill
O - other (needs explanation in notes)
R - recapture information from between-record verification
V - photo verification done and age changed based upon information in photo
G - used by IBP after changing the age to a less specific age category because it is not possible to age the bird to the more specific category in that month according to Pyle (1997)
U - used by IBP when HA is not provided or cannot be assessed from supplemental data
Y - used by IBP after changing the age to 1 (AHY) because no useful evidence exists within the Molt Limits and Plumage fields to support the more specific age of 5, 6, 7 or 8 (SY, ASY, TY or ATY) in that month according to Pyle (1997)

11. WRP: age using molt based ageing system created by Wolfe-Ryder-Pyle based on recognition of molt cycle and plumage phase. Base codes include:
UCU - unknown molt cycle, unknown plumage
UCB - unknown molt cycle, basic plumage
UCA - unknown molt cycle, alternate plumage
FCJ - first molt cycle, juvenal plumage
FCF - first molt cycle, formative plumage
FCA - first molt cycle, alternate plumage
FCS - first molt cycle, supplemental plumage
SCB - second molt cycle, basic plumage
SCA - second molt cycle, alternate plumage
DCB - definitive molt cycle, basic plumage
DCA - definitive molt cycle, alternate plumage

12. SEX: sex (final determination)
M - male
F - female
U - unknown
X - unattempted

13. HS: how sexed
    - B - brood patch
    - C - cloacal protuberance
    - P - plumage
    - J - juvenal plumage
    - E - eye color
    - I - mouth\bill
    - O - other (requires explanation in notes)
    - T - tail length
    - W - wing chord
    - R - recapture information (based on between-record verification)
    - G - used by IBP after changing the sex to unknown because it is not possible to sex the bird male or female in that month according to Pyle (1997)
    - U - used by IBP when HS is not provided or cannot be assessed from supplemental data

14. 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

15. CP: cloacal protuberance
    - 0 - none
    - 1 - small
    - 2 - medium
    - 3 - large

16. BP: brood patch
    - 0 - none
    - 1 - smooth (feathers lost)
    - 2 - vascularized
    - 3 - heavy (very heavily vascularized)
    - 4 - wrinkled
    - 5 - molting (growing new feathers)

17. 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

18. BM: body molt
    - 0 - none
    - 1 - trace
    - 2 - light
    - 3 - medium
    - 4 - heavy

19. FM: flight feather molt
    - N - no flight feather molt
    - A - asymmetric
    - S - symmetric
    - J - juvenal flight feather growth

20. FW: flight feather wear (outer 4-5 primaries only)
    - 0 - none
    - 1 - slight
    - 2 - light
    - 3 - moderate
    - 4 - heavy
    - 5 - excessive

21. 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

22. WNG: wing chord (mm)

23. WEIGHT: mass of bird (g)

24. 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
    - 325 - healthy bird with geotracker and released
    - 500 - injured bird banded and released
    - 501 - injured bird color-banded and released

25. DATE: date of capture (MM/DD/YY)

26. TIME: starting time of the net run during which the bird was captured, to the nearest ten minutes, e.g., 7:32am=073, 24-hr clock

27. NET: up to 4-character original net designation (net in which bird was captured)

28. ANET: 2-character numeric net designation used in analyses

29. 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)
- R - band removed from bird and then bird released bandless
- " " - blank, bird released alive, uninjured

30. PPC: 2004 and onward, designates the feather generations present in the primary coverts
- J - Juvenal; feather tract comprised entirely of retained juvenal feathers or non-feathered body part shows characteristics indicative of a young bird
- L - Molt limit; molt limit between juvenal and formative feathers
- F - Formative; feather tract comprised entirely of formative feathers
- B - Basic; feather tract entirely of basic feathers or non-feathered body part shows characteristics indicative of an adult bird
- R - Retained; both juvenal and basic feathers are present within the tract
- M - Mixed; multiple generations of basic feathers are present in the tract
- A - Alternate; ALL feathers in the tract are of alternate plumage
- N - Non-juvenal; feather tract may include formative, basic, and/or alternate feathers, but no juvenal feathers are present.
- U - Unknown; feather tract or non-feathered body part examined, but shows ambiguous characteristics or cannot be coded with confidence

1998 to 2003, 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

31. SSC: 2004 and onward, designates the feather generations present in the secondary coverts and in 1998 to 2003, age class of bird indicated by feather generations present in the secondary coverts
Codes as for PPC

32. PPF: 2004 and onward, designates the feather generations present in the primaries and in 1998 to 2003, age class of bird indicated by feather generations present in the primaries
Codes as for PPC

33. SSF: 2004 and onward, designates the feather generations present in the secondaries, not including tertials, and in 1998 to 2003, age class of bird indicated by feather generations present in the secondaries, not including tertials
Codes as for PPC

34. TT: 2004 and onward, designates the feather generations present in the tertials, and in 1998 to 2003, age class of bird indicated by feather generations present in the tertials
Codes as for PPC

35. RR: 2004 and onward, designates the feather generations present in the rectrices, excluding central pair, and in 1998 to 2003, age class of bird indicated by feather generations present in the rectrices, excluding central pair
Codes as for PPC

36. HD: 1998 to 2003, 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

37. UPP: 1998 to 2003, 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

38. UNP: 1998 to 2003, 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

39. BPL: 2004 and onward, collective for the codes HD, UPP, and UNP designates the feather generations present in the feathers of the head, upperparts, and underparts,
Codes as for PPC

40. NF: 2004 and onward, indicates the plumage best matched by non-feather characteristics, including bill, mouth, eye, legs, and feet
- J - non-feather parts indicative of a young bird
- B - non-feather parts indicative of an adult bird
- N - non-feather parts indicative of an adult bird
- U - Unknown; non-feather parts not indicative of a specific age

1998 to 2003, 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

41. FP: indicates whether feathers were pulled.
- P - rectrices pulled (possibly contour feathers as well) (pre-2006 coding)
- C - only contour feathers pulled (pre-2006 coding)
- O - Outer two rectrices were pulled (i.e., rectrix 6 from both the left and right side of the tail). Previous to 2006 this was indicated by FTHR. PULL = P.
- I - An inner and an outer rectrix were pulled (i.e., rectrix 1 from one side and rectrix 6 from the other side were pulled).
- "-" - dash; no feathers were pulled

42. N: codes that designate whether or not the record is to be included in productivity and survivorship analyses

The following codes mean record is not to be used in productivity or survivorship analyses:

- O - not caught at MAPS station
- S - caught within MAPS station boundary, but not 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
- 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 (1989-1991)

43. B: comparability to previous year (year Before), using constant-effort analysis

The following codes mean record cannot be used in constant-effort productivity analyses:

- B - non-comparable, using net-by-net, hour-by-hour protocol (protocol used subsequent to 1991)
- 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.

44. A: comparability to next year (year After), using constant-effort analysis

Same codes as B (Item 63), except for B, plus 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

45. 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 during all years the station was operated)
- U - Usual breeder (summer resident or suspected summer resident for more than 2 of the years the station was operated, but not all years)
- O - Occasional breeder (summer resident or suspected summer resident for 2 or fewer of the years the station was operated)
- T - Transient (station lies within the species' breeding range, but no individual of the species was a summer resident at that station during any year)

A - Altitudinal disperser. (A species which breeds only at lower elevations than that of the station and which disperses to higher elevations after breeding)
M - Migrant (station falls outside of the species' normal breeding range)
? - Uncertain species identification (Individuals of the taxon were not identified to species; no breeding status was assigned)

46. IP: intended period. Period in which the effort was intended to be completed (defined by date), with adjustments for weather and other eventualities. Periods 1-10 are the regular MAPS season. TMAPS can encompass any or all periods.
Period 1: May 01 - May 10
Period 2: May 11 - May 20
Period 3: May 21 - May 30
Period 4: May 31 - June 09
Period 5: June 10 - June 19
Period 6: June 20 - June 29
Period 7: June 30 - July 09
Period 8: July 10 - July 19
Period 9: July 20 - July 29
Period 10: July 30 - August 08
Period 11: August 09 - August 18 (only part of regular MAPS effort up through the 1996 MAPS season)
Period 12: August 19 - August 28 (only part of regular MAPS effort up through the 1996 MAPS season)
"88" non-MAPS effort (use for MAPS data but not for TMAPS)

47. SP: sub-period. Used to designate the multiple days of operation in a period on which the station was run (ranked from A-J). The sub-periods are ranked according to: (1) whether at least 1/3rd the effort was completed within the sub-period; and (2) date. Blank for non-MAPS effort.

Structure for MAPS banding data

Field	Field Name	Type	Width	Dec
1	LOC	Character	4	
2	STA	Numeric	5	
3	STATION	Character	4	
4	C	Character	1	
5	BAND	Character	9	
6	SPN	Numeric	6	0
7	NUMB	Character	5	
8	SPEC	Character	4	
9	AGE	Character	1	
10	HA	Character	2	
11	WRP	Character	3	
12	SEX	Character	1	
13	HS	Character	2	
14	SK	Character	1	
15	CP	Character	1	
16	BP	Character	1	
17	F	Character	1	
18	BM	Character	1	
19	FM	Character	1	
20	FW	Character	1	
21	JP	Character	1	
22	WNG	Numeric	3	
23	WEIGHT	Numeric	5	1
24	STATUS	Character	3	
25	DATE	Date	8	
26	TIME	Character	3	
27	NET	Character	4	
28	ANET	Character	2	
29	DISP	Character	1	
30	PPC	Character	1	
31	SSC	Character	1	
32	PPF	Character	1	
33	SSF	Character	1	
34	TT	Character	1	
35	RR	Character	1	
36	HD	Character	1	
37	UPP	Character	1	
38	UNP	Character	1	
39	BPL	Character	1	
40	NF	Character	1	
41	FP	Character	1	

42	N	Character	1
43	B	Character	1
44	A	Character	1
45	BRSTAT	Character	1
46	IP	Character	2
47	SP	Character	1

Code Definitions of MAPS Effort Data

Revised November 8, 2022

The information provided in 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; f) flags on nets run more often than normal within a period; and g) flags on years in which the season was delayed due to weather.

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

2. STA: unique station number

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

4. DATE: date the station was run (MM/DD/YYYY)

5. IP: intended period. Period in which the effort was intended to be completed (defined by date), with adjustments for weather and other eventualities. Periods 1-10 are the regular MAPS season. TMAPS can encompass any or all periods.

Period 1:	May 01 - May 10
Period 2:	May 11 - May 20
Period 3:	May 21 - May 30
Period 4:	May 31 - June 09
Period 5:	June 10 - June 19
Period 6:	June 20 - June 29
Period 7:	June 30 - July 09
Period 8:	July 10 - July 19
Period 9:	July 20 - July 29
Period 10:	July 30 - August 08
Period 11:	August 09 - August 18 (only part of regular MAPS effort up through the 1996 MAPS season)
Period 12:	August 19 - August 28 (only part of regular MAPS effort up through the 1996 MAPS season)
Period 13:	August 29 – September 07
Period 14:	September 08 – September 17
Period 15:	September 18 - September 27
Period 16:	September 28 - October 07
Period 17:	October 08 - October 27
Period 18:	October 28 – November 01
Period 19:	November 02 - November 11
Period 20:	November 12 - November 21
Period 21:	November 22 – December 01
Period 22:	December 02 - December 11
Period 23:	December 12 - December 21
Period 24:	December 22 - December 31
Period 25:	January 01 - January 10
Period 26:	January 11 - January 20
Period 27:	January 21 - January 30
Period 28:	January 31 – February 09

Period 29: February 10 - February 19
Period 30: February 20 - March 01
Period 31: March 02 - March 11
Period 32: March 12 - March 21
Period 33: March 22 – March 31
Period 34: April 01 - April 10
Period 35: April 11 - April 20
Period 36: April 21 - April 30
"88" non-MAPS effort (use for MAPS data but not for TMAPS)

6. SP: sub-period. Used to designate the multiple days of operation in a period on which the station was run (ranked from A-J). The sub-periods are ranked according to: (1) whether at least 1/3rd the effort was completed within the sub-period; and (2) date. Blank for non-MAPS effort.

7. NET: up to 4-character original net designation (net in which bird was captured)

8. ANET: 2-character numeric net designation used in analyses, matching the ANET designations in the banding data file

9. LENGTH: length of the net relating to the standardized net length of 12m; used in the calculation of net hours; E.g
12m= 1.000, 9m = 0.750, 6m = 0.500, etc.

10. START: starting time of the first net run during which the net was opened, to the nearest ten minutes, e.g., 7:30 am=073

11. END: starting time of the net run during which the net was closed, to the nearest ten minutes, e.g., 11:32am=113

12. MAN: codes that designate any unusual running of the net that allows the 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, i.e. 2, 3, etc.) required to make up the full effort for that period and sub-period. (e.g. May 05 060-090, May 06 090-120, Man=2)
- ? - designates that ANET, START, or END lack full information and were compiled based upon the data available (usually a result of the protocol up to 1992).

13. MA: a designation (A) for use by the computer programs to indicate unusual net operation, i.e. broken, divided or questionable effort. Included in the year in which the unusual net operation occurred and in the corresponding record for the previous year (i.e. same intended period, sub-period, net) to indicate the unusual effort for the year after.

14. MB: a designation (B) for use by the computer programs to indicate unusual net operation, i.e. broken, divided or questionable effort. Included in the year in which the unusual net operation occurred and in the corresponding record for the

following year (i.e. same intended period, sub-period, net) to indicate the unusual effort for the year before.

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 with a code in the N field is not part of standard MAPS protocol.
    - O - effort from net not within the MAPS station boundary
    - S - effort from net within MAPS station boundary, but not a MAPS net
    - 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 for that year, 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 run throughout the MAPS season. This code is never assigned to effort from sub-period A. E.g. the station was operated three days a period except for one period in which it was operated only two days. Records for sub-period A and B would not receive an E designation but all records from sub-period C for the year would.

17. YEAR: year the station was run.

18. SHIFT: the number of periods the breeding, and hence MAPS, season was delayed due to extreme weather conditions.

19. DELAY: the average delay between the start of the net run and the time recorded on the banding data sheet

Structure for MAPS Effort Data

Field	FieldName	Type	Width	Dec
1	LOC	Character	4	
2	STA	Numeric	5	
3	STATION	Character	4	
4	DATE	Date	8	
5	IP	Character	2	
6	SP	Character	1	
7	NET	Character	4	
8	ANET	Character	2	
9	LENGTH	Numeric	4	2
10	START	Character	3	
11	END	Character	3	
12	MAN	Character	1	
13	MA	Character	1	
14	MB	Character	1	
15	N	Character	1	
16	E	Character	1	
17	YEAR	Numeric	4	
18	SHIFT	Character	1	
19	DELAY	Character	2	

Code Definitions of MAPS Net Hours Data

Revised November 8, 2022

The information provided in this file includes a) the periods and sub-periods the station was operated each year, through MAPS period 10; b) the number of net hours each period/sub-period combination; and, c) the sum of net hours at each station per year – all sub-periods are included.

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

2. STA: unique station number

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

4. YEAR: year the station was run.

5. IP: intended period. Period in which the effort was intended to be completed (defined by date), with adjustments for weather and other eventualities. Periods 1-10 are the regular MAPS season are the only periods included in this file.

Period 1:	May 01 - May 10
Period 2:	May 11 - May 20
Period 3:	May 21 - May 30
Period 4:	May 31 - June 09
Period 5:	June 10 - June 19
Period 6:	June 20 - June 29
Period 7:	June 30 - July 09
Period 8:	July 10 - July 19
Period 9:	July 20 - July 29
Period 10:	July 30 - August 08

6. SP: sub-period. Used to designate the multiple days of operation in a period on which the station was run (ranked from A-J). The sub-periods are ranked according to: (1) whether at least 1/3rd the effort was completed within the sub-period; and (2) date. Blank for non-MAPS effort.

7. IP_NETHRS: sum of the number of MAPS nets multiplied by the net lengths and hours operated for each period and sub-period

8. YR_NETHRS: sum of the number period and sub-period net hours over one year of operation

Structure for MAPS Effort Data

Field	FieldName	Type	Width	Dec
1	LOC	Character	4	
2	STA	Numeric	5	
3	STATION	Character	4	
4	YEAR	Numeric	4	
5	IP	Character	2	
6	SP	Character	1	
7	IP_NETHOURS	Numeric	6	3
8	YR_NETHOURS	Numeric	8	3

Code Definitions of MAPS Breeding Status Data

Revised November 9, 2022

For each species at each station, the file includes a period-by-period determination of species activity and a year-by-year determination of its breeding status. The file also provides information regarding the years during which at 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: location code (identifies national forest, national park, military installation or other location where a single station or a set of stations is located and is run by a single operator). Location codes are unique.

2. STA: unique station number

3. STA2: super-station number (indicates whether or not the station center is in close enough proximity [within 1350m] to the centers of one or more other stations for them to be grouped together as a super-station for survivorship analyses). The super-station number is the lowest station number + "S" for groups of two or more stations or is represented by six dashes ("------") for ungrouped single stations. Groups of stations for which the proximity of the station centers to one another are not exactly known because of imprecise latitude and longitude coordinates the number is the lowest station number + "?" for groups of two or more stations.

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

5. SPN: species sequence number. A unique sequence number was created by The Institute for Bird Populations to place species into the AOS taxonomy and using AOS nomenclature. American Ornithological Society (AOS; R.T. Chesser, et al., comps.). 2021. Sixty-second supplement to the American Ornithological Society's checklist of North American birds. Ornithology: URL: https://doi.org/10.1093/ornithology/ukab037

6. NUMB: species number. A sequence number was created by the Institute for Bird Populations to place species into taxonomic order according to AOU 2008. Some taxa are merged with others and given a single species number for analyses as the species cannot be reliably separated in the hand. These are:
    - 11475 - Traill's Flycatcher (includes Alder, Willow, and Traill's)
    - 11555 - Western Flycatcher (includes Pacific-slope, Cordilleran, and Western)

7. SPEC: four-letter species alpha code. Four-letter species alpha codes from "Four-letter and six-letter alpha codes for birds recorded from the American Ornithologists' Society check-list"; https://www.birdpop.org/docs/misc/Alpha_codes_tax.pdf

8. YR: year

9-32. Period Specific Breeding Status codes. The status of each species as encountered during each period of operation. Prior to 1999, period-specific codes were not entered into the databases even though they were recorded on paper data.

9. PS1: period breeding status code for period 1 (May 01 - May 10)
   - C - confirmed breeder; information found during this period confirms the species as a breeder for the season
   - P - probable breeder; information found during this period suggests, but does not confirm a species as a breeder:
   - O - observed; information found during this period indicates the species was detected but displayed no evidence of local breeding
   - – - absent; the species was not encountered during this period

10. SB1: daily behavior sub-code. Each sub-code is assigned to a specific period breeding status code and is the supporting evidence for assigning that period breeding status code.

Sub-codes for period breeding status code = C
   - N - current year's nest found in the study area with eggs or young, in the process of being built, or already depredated or abandoned
   - M - adult was seen gathering or carrying nesting material to a likely nest site in the study area
   - F - adult was seen carrying food or fecal sac to or from a likely nest site in the study area
   - D - distraction display or injury feigned by an adult bird
   - L - a young bird incapable of sustained flight (a "local") captured in the study area; or very young (stub-tailed) fledglings found being fed by parents in the study area

Sub-codes for period breeding status code = P
   - C - copulation or courtship observed of a species within its breeding range
   - T - other territorial behavior observed in the study area
   - S - territorial song or drumming heard

Sub-codes for period breeding status code = O
   - B - bird captured or banded. NOTE: The presence of a brood patch or cloacal protuberance on a single individual is not valid evidence of local breeding
   - E - bird encountered (seen or heard) in the study area but with no territorial behavior
   - O - bird encountered flying over the study area.
   - Z - bird both captured/banded and encountered in, or flying over, the study area.

11. PS2: period breeding status code for period 2 (May 11 - May 20)
    Same codes as PS1

12. SB2: daily behavior sub-code.
    Same codes as SB1

13. PS3: period breeding status code for period 3 (May 21 - May 30)
    Same codes as PS1

14. SB3: daily behavior sub-code.
    Same codes as SB1

15. PS4: period breeding status code for period 4 (May 31 - June 09)
    Same codes as PS1

16. SB4: daily behavior sub-code.
    Same codes as SB1

17. PS5: period breeding status code for period 5 (June 10 - June 19)
Same codes as PS1

18. SB5: daily behavior sub-code.
Same codes as SB1

19. PS6: period breeding status code for period 6 (June 20 - June 29)
Same codes as PS1

20. SB6: daily behavior sub-code.
Same codes as SB1

21. PS7: period breeding status code for period 7 (June 30 - July 09)
Same codes as PS1

22. SB7: daily behavior sub-code.
Same codes as SB1

23. PS8: period breeding status code for period 8 (July 10 - July 19)
Same codes as PS1

24. SB8: daily behavior sub-code.
Same codes as SB1

25. PS9: period breeding status code for period 9 (July 20 - July 29)
Same codes as PS1

26. SB9: daily behavior sub-code.
Same codes as SB1

27. PS10: period breeding status code for period 10 (July 30 - August 08).
Same codes as PS1

28. SB10: daily behavior sub-code.
Same codes as SB1

29. PS11: period breeding status code for period 11 (August 9 - August 18). Only part of regular MAPS effort up through the 1996 MAPS season.
Same codes as PS1

30. SB11: daily behavior sub-code.
Same codes as SB1

31. PS12: period breeding status code for period 12 (August 18 - August 28). Only part of regular MAPS effort up through the 1996 MAPS season.
Same codes as PS1

32. SB12: daily behavior sub-code.
Same codes as SB1

33. YS: Year-Specific Breeding Status codes.
- 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 (the station is within the breeding range of the species, but no individual of the species was a summer resident at the station)
- A - altitudinal disperser (species breeds only at lower elevations than that of the station and which disperses to higher elevations after breeding)
- H - high altitudinal disperser (species breeds usually designated an altitudinal disperser. However, has resided during the height of the breeding season (not just during the post-breeding period) in a given year above its normal breeding elevation.
- M - migrant (the station is not within the breeding range of the species, and the species was not a summer resident)
- E - extralimital breeder (one or more individuals of the species was a summer resident at the station, but the station lies outside of the normal breeding range of the species)
- – - absent (no evidence of species in data; presumably absent from station during the year in question)
- ? - uncertain species identification or band number (no breeding status assigned)
- # - station operated this year, but breeding status determinations were not made for species that were not captured; used only for species without capture records
- D - the species was only encountered at the station outside of the MAPS season, but the station lies within the breeding range of the species.
- W - the species was only encountered at the station outside of the MAPS season, and the station lies outside of the breeding range of species.
- @ - the Breeding Status List is missing or incomplete for these species this year.

34. B: the presence of banding data. Banding data is cross-referenced to determine species captured in this particular year.
- X - species was captured
- R - species was not captured, but breeding status information was recorded on a breeding status list, a point count form, etc.
- " " - blank, species was not captured

Structure for MAPS Breeding Status Data

Field	Field Name	Type	Length
1	LOC	Character	4
2	STA	Numeric	5
3	STA2	Character	6
4	STATION	Character	4
5	SPN	Numeric	6
6	NUMB	Character	5
7	SPEC	Character	4
8	YR	Numeric	4
9	PS1	Character	1
10	SB1	Character	1
11	PS2	Character	1
12	SB2	Character	1
13	PS3	Character	1
14	SB3	Character	1
15	PS4	Character	1
16	SB4	Character	1
17	PS5	Character	1
18	SB5	Character	1
19	PS6	Character	1
20	SB6	Character	1
21	PS7	Character	1
22	SB7	Character	1
23	PS8	Character	1
24	SB8	Character	1
25	PS9	Character	1
26	SB9	Character	1
27	PS10	Character	1
28	SB10	Character	1
29	PS11	Character	1
30	SB11	Character	1
31	PS12	Character	1
32	SB12	Character	1
33	YS	Character	1
34	B	Character	1

Code Definitions of Compiled MAPS Breeding Status Data

Revised November 22, 2022

For each species at each station, the file includes a year-by-year determination of its breeding status and an integrated breeding status code which includes information for all years in which the station was operated.

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

2. STA: unique station number

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

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

5. SPN: species sequence number. A unique sequence number was created by The Institute for Bird Populations to place species into the AOS taxonomy and using AOS nomenclature. American Ornithological Society (AOS; R.T. Chesser, et al., comps.). 2021. Sixty-second supplement to the American Ornithological Society's checklist of North American birds. Ornithology: URL: https://doi.org/10.1093/ornithology/ukab037

6. NUMB: species number. A sequence number was created by the Institute for Bird Populations to place species into taxonomic order according to AOU 2008. Some taxa are merged with others and given a single species number for analyses as the species cannot be reliably separated in the hand. These are:
   11475 - Traill's Flycatcher (includes Alder, Willow, and Traill's)
   11555 - Western Flycatcher (includes Pacific-slope, Cordilleran, and Western)

7. SPEC: species alpha code. Four-letter species alpha codes from "Four-letter and six-letter alpha odes for birds recorded from the American Ornithologists' Society check-list"; https://www.birdpop.org/docs/misc/Alpha_codes_tax.pdf

8-34 Year Specific Breeding Status codes.

While the annual codes B, L, T, A, and - can occur in different years within a single species record, the annual code M can **only** occur with annual codes 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.**

8. BS92: breeding status code for 1992.
   - 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 (the station is within the breeding range of the species, but no individual of the species was a summer resident at the station)
   - A - altitudinal disperser (species breeds only at lower elevations than that of the station and species disperses to higher elevations after breeding)
   - H - higher altitudinal (than normal) breeder (species normally breeds only at lower elevations than that of the station but has resided above its normal breeding elevation during the height of the breeding season)
   - M - migrant (the station is not within the breeding range of the species, and the species was not a summer resident)
   - E - extralimital breeder (one or more individuals of the species was a summer resident at the station, but the station lies outside of the normal breeding range of the species)
   - – - absent (no evidence of species in data; presumably absent from station during the year in question)
   - ? - uncertain species identification or band number (no breeding status assigned)
   - * - station not operated this year
   - # - station operated this year, but breeding status determinations were not made for species that were not captured; used only for species without capture records
   - D - the species was only encountered at the station outside of the MAPS season, but the station lies *within* breeding range of the species.
   - W - the species was only encountered at the station outside of the MAPS season, and the station lies *outside* of the breeding range of species.
   - @ - the Breeding Status List is missing or incomplete for these species this year.

9. BS93: breeding status code for 1993
   Same codes as BS92

10. BS94: breeding status code for 1994
    Same codes as BS92

11. BS95: breeding status code for 1995
    Same codes as BS92

12. BS96: breeding status code for 1996
    Same codes as BS92

13. BS97: breeding status code for 1997
    Same codes as BS92

14. BS98: breeding status code for 1998
    Same codes as BS92

15. BS99: breeding status code for 1999
Same codes as BS92

16. BS00: breeding status code for 2000
Same codes as BS92

17. BS01: breeding status code for 2001
Same codes as BS92

18. BS02: breeding status code for 2002
Same codes as BS92

19. BS03: breeding status code for 2003
Same codes as BS92

20. BS04: breeding status code for 2004
Same codes as BS92

21. BS05: breeding status code for 2005
Same codes as BS92

22. BS06: breeding status code for 2006
Same codes as BS92

23. BS07: breeding status code for 2007
Same codes as BS92

24. BS08: breeding status code for 2008
Same codes as BS92

25. BS09: breeding status code for 2009
Same codes as BS92

26. BS10: breeding status code for 2010
Same codes as BS92

27. BS11: breeding status code for 2011
Same codes as BS92

28. BS12: breeding status code for 2012
Same codes as BS92

29. BS13: breeding status code for 2013
Same codes as BS92

30. BS14: breeding status code for 2014
Same codes as BS92

31. BS15: breeding status code for 2015
Same codes as BS92

32. BS16: breeding status code for 2016
Same codes as BS92

33. BS17: breeding status code for 2017
Same codes as BS92

34. BS18: breeding status code for 2018
Same codes as BS92

35. 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 during 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 the species' breeding range, but no individual of the species was a summer resident at that station during any year)
- A - Altitudinal disperser. (A species which breeds only at lower elevations than that of the station and which disperses to higher elevations after breeding)
- M - Migrant (station falls outside of the species' normal breeding range)
- ? - Uncertain species identification (Individuals of the taxon were not identified to species; no breeding status was assigned)

Structure for Compiled MAPS Breeding Status Data
NOTE: there may be fewer fields if the user selected years other than 1992-2018 to download data for.

Field	Field Name	Type	Length
1	LOC	Character	4
2	STA	Numeric	5
3	STA2	Character	6
4	STATION	Character	4
5	SPN	Numeric	6
6	NUMB	Character	5
7	SPEC	Character	4
8	BS92	Character	4
9	BS93	Character	1
10	BS94	Character	1
11	BS95	Character	1
12	BS96	Character	1
13	BS97	Character	1
14	BS98	Character	1
15	BS99	Character	1
16	BS00	Character	1
17	BS01	Character	1
18	BS02	Character	1
19	BS03	Character	1
20	BS04	Character	1
21	BS05	Character	1
22	BS06	Character	1
23	BS07	Character	1
24	BS08	Character	1
25	BS09	Character	1
26	BS10	Character	1
27	BS11	Character	1
28	BS12	Character	1
29	BS13	Character	1
30	BS14	Character	1
31	BS15	Character	1
32	BS16	Character	1
33	BS17	Character	1
34	BS18	Character	1
35	BRSTAT	Character	1

Code definitions of CNTRL.dbf

Revised November 8, 2022

CNTRL.dbf is the analysis control file which includes the information on the determination of a station's suitability for use in productivity and/or survivorship analyses. For each year of station operation, a determination is made, based on the amount and distribution of effort through the MAPS season, as to its appropriateness for productivity and/or survivorship analyses.

1. REGION: MAPS region (1-8)

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

3. STA: station number

4. STA2: super-station number (indicates whether or not the station center is in close enough proximity [within 1350m] to the centers of one or more other stations for them to be grouped together as a super-station for survivorship analyses). The super-station number is the lowest station number + "S" for groups of two or more stations or is represented by six dashes ("------") for ungrouped single stations. Groups of stations for which the proximity of the station centers to one another are not exactly known because of imprecise latitude and longitude coordinates the number is the lowest station number + "?" for groups of two or more stations.

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

6. ELEV: average elevation (above mean sea level - amsl) in meters at which the station is located
9999 = no elevation information available for this station

7. STATE: two-character postal code for state, province or territory in which the station is located

8. GEOSTRT: designates the period in which the station should begin operation 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. D92: codes in this field designate the type of analysis the data from the station can be used for in 1989. The determination is based the number and distribution of periods run throughout the year. The year is broken down into adult and young superperiods according to the GEOSTRT designation.
    - N - the station was not run that year
    - I - the station was operated but the data has not yet been verified
    - S - the station met the requirements for use in survivorship analyses. The station ran three complete periods within the adult superperiod A complete period must have run at least 1/3 the normal effort per period. Normal effort is defined by the standard open and close for the station and the number of nets operated in a year. In addition, the total effort included in the adult superperiod must be at least ½ the normal effort of three periods.

T - station did not quite meet the requirements for survivorship analysis as outlined above for S, but it was decided administratively that the effort was close enough for the year to be considered usable for survivorship analysis

B - the data from the year meets the criteria for both survivorship and productivity analyses. To be used in productivity analyses the station must usable for survivorship and, in addition, must have run a minimum of two complete periods in the young superperiod (see above for the definition of a complete period.) The total effort included in the young superperiod must be at least ½ the normal effort of two periods.

C - station did not quite meet the requirements for usability in both survivorship and productivity analysis as outlined above for B, but it was decided administratively that the effort was close enough for the year to be considered usable for both survivorship and productivity analysis

X - the station was operated but the data from the year meets the criteria for neither survivorship nor productivity analyses

11. D93: analysis type designation for 1993
Same codes as in D92.

12. D94: analysis type designation for 1994
Same codes as in D92.

13. D95: analysis type designation for 1995
Same codes as in D92.

14. D96: analysis type designation for 1996
Same codes as in D92.

15. D97: analysis type designation for 1997
Same codes as in D92.

16. D98: analysis type designation for 1998
Same codes as in D92.

17. D99: analysis type designation for 1999
Same codes as in D92.

18. D00: analysis type designation for 2000
Same codes as in D92.

19. D01: analysis type designation for 2001
Same codes as in D92.

20. D02: analysis type designation for 2002
Same codes as in D92.

21. D03: analysis type designation for 2003
Same codes as in D92.

22. D04: analysis type designation for 2004
Same codes as in D92.

23. D05: analysis type designation for 2005
Same codes as in D92.

24. D06: analysis type designation for 2006
Same codes as in D92.

25. D07: analysis type designation for 2007
Same codes as in D92.

26. D08: analysis type designation for 2008
Same codes as in D92.

27. D09: analysis type designation for 2009
Same codes as in D92.

28. D10: analysis type designation for 2010
Same codes as in D92.

29. D11: analysis type designation for 2011
Same codes as in D92.

30. D12: analysis type designation for 2012
Same codes as in D92.

31. D13: analysis type designation for 2013
Same codes as in D92.

32. D14: analysis type designation for 2014
Same codes as in D92.

33. D15: analysis type designation for 2015
Same codes as in D92.

34. D16: analysis type designation for 2016
Same codes as in D92.

35. D17: analysis type designation for 2017
Same codes as in D92.

36. D18: analysis type designation for 2018
Same codes as in D92.

Structure for CNTRL.dbf

Field	Field Name	Type	Width	Dec
1	REGION	Character	1	
2	LOC	Character	4	
3	STA	Numeric	5	0
4	STA2	Character	6	
5	STATION	Character	4	
6	ELEV	Numeric	4	0
7	STATE	Character	2	
8	GEOSTRT	Character	2	
9	ACTSTRT	Character	2	
10	D92	Character	1	
11	D93	Character	1	
12	D94	Character	1	
13	D95	Character	1	
14	D96	Character	1	
15	D97	Character	1	
16	D98	Character	1	
17	D99	Character	1	
18	D00	Character	1	
19	D01	Character	1	
20	D02	Character	1	
21	D03	Character	1	
22	D04	Character	1	
23	D05	Character	1	
24	D06	Character	1	
25	D07	Character	1	
26	D08	Character	1	
27	D09	Character	1	
28	D10	Character	1	
29	D11	Character	1	
30	D12	Character	1	
31	D13	Character	1	
32	D14	Character	1	
33	D15	Character	1	
34	D16	Character	1	
35	D17	Character	1	
36	D18	Character	1	