

Montana Bird Distribution Adopt a Quarter-quarter Latilong Instructions

Thank you for agreeing to adopt a quarter-quarter latilong (QQLL). This instruction sheet explains:

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How to Submit Records:

If you want to contribute bird observation records to the 7th edition of *Montana Bird Distribution*, you can:

- If you are willing to adopt a quarter-quarter latilong (QQLL), you can use the simpler Bird Observation Record Sheet (Excel spreadsheet) from MT Audubon website (file name: MT_Bird_Dist_Record_Sheet_Simple_2009.xls). Use this spreadsheet to enter your bird sightings by QQLL. This simpler spreadsheet should be submitted by email to Janet Ellis at jellis@mtaudubon.org.
- One simple way to record your handwritten records is to print a copy of the simple QQLL spreadsheet (file name: MT_Bird_Dist_Record_Sheet_Simple_2009.xls), and use that spreadsheet to write in your records. All written bird sighting records should be sent to: Montana Audubon PO Box 595 Helena, MT 59624 (if you can enter the information on-line that would be best – email to jellis@mtaudubon.org).
- Instead of using this spreadsheet system, records may be submitted online: <http://mtnhp.org/observationform/> (simple version) or <http://mtnhp.org/Tracker/> (more detailed version).
- A more detailed Excel spreadsheet can be downloaded from Tracker: <http://mtnhp.org/Tracker/>. Use this spreadsheet to enter your bird sightings.

What Records Should be Submitted:

We are interested in bird observations recorded since the last edition of *Montana Bird Distribution* was published in 2003.

What is a Quarter-quarter Latilong?

The Montana Bird Distribution project is currently recording birds on a quarter-quarter latilong (QQLL) basis. To accomplish this, the state of Montana is divided into a grid-like pattern of units called latilongs, quarter-latilongs, and, smaller yet, quarter-quarter latilongs. The word “latilong” is a combination of the words “latitude” and “longitude” and represents the area of land formed by the intersection of these imaginary mapping lines. Montana is divided into 49 latilongs, 185 quarter-latilongs, and over 700 quarter-quarter latilongs. Each QQLL covers an area roughly 11 miles by 17 miles.

Where to Find QQL Maps:

If you want an 8-1/2" X 11" map of a specific QQL, (1) we can send you the map, or (2) you can download maps from the following location: <http://mtnhp.org/MTBIRD/> (the link to this site is also available from the Montana Audubon website).

In addition to creating maps of specific QQLs, we have created special maps for "popular birding" areas such as Freezout Lake, wildlife refuges, and cities occupying several QQLs (e.g. Billings, Great Falls, Helena, Missoula, etc.). If you don't see the map you need, contact us and we'll get it for you!

Specific Instructions for QQL Spreadsheet:

The QQL MT Bird Distribution spreadsheet is in Microsoft Excel (file name: MT_Bird_Dist_Record_Sheet_Simple_2009.xls). You need to have the Excel program to use the spreadsheet. We can also send you a spreadsheet in Microsoft Works.

Data Field	Instructions
Observer	First and Last name of person who observed the animal (e.g., Joe Smith)
Contact Information	Please give us phone, email, and/or address so that someone can contact you with any questions about observations.
Common Name	See "MT Bird List" worksheet for current common name. You may choose to copy and paste from this list to avoid spelling errors.
Status (choose one): B b t W w	This field must contain one of the following letters: B = direct evidence of breeding, b = Indirect or circumstantial evidence of breeding, or t = No evidence of breeding (during breeding season February 16 to December 14); W = overwintering or w = observed during winter season (during wintering season December 15 to February 15). The definitions for these terms can be found in the QQL Instruction Sheet on the Montana Audubon website or in the 6th edition of <i>Montana Bird Distribution</i> .
Date	Month/Day/Year (e.g., 12/19/2005). Please enter a date or provide comments if observations were not made on a single date.
QQL	Quarter-Quarter Latilong in which the observation was made. See image of QQL boundaries online at http://mtnhp.org/MTBIRD/ (map in upper right corner).
Location	Note: In general the more precise the location information you provide, the more valuable your record will be for conservation efforts. General description of location, ideally with reference to a prominent landmark (e.g. western slope of Sphinx Mountain, 22 miles SE of Ennis; or Missouri River at Fort Benton). You can also include gps points; Township, Range & Section coordinates; etc. When reporting GPS point locations: when the datum is not WGS 84, please indicate.

The QQLL Spreadsheet is actually 3 spreadsheets (see illustration above): the first spreadsheet is titled "MBD Data Entry Sheet"; this sheet is where you enter your records. The 2nd spreadsheet is titled "Instructions"; it has the *Specific Instructions for QQLL Spreadsheet* (above). And the 3rd spreadsheet is titled "MT Bird List"; it is a bird list that can be sorted alphabetically or taxonomically.

Bird Status Codes and Criteria

Each bird record needs to indicate the "status" of the bird, which requires the observer to record the appropriate symbol for Bird Status (B, b, t, W, or w). This section of the Instruction Sheet explains each of these terms.

The maps in *Montana Bird Distribution* are based upon observations made during two distinct seasons, the:

- **Breeding season** (February 16 to December 14, which includes spring and fall migrations for many species); and the
- **Wintering season** (December 15 to February 15).

Letters are used to describe the status of the bird species observed. The status tells us whether the species recorded exhibited behavior indicating:

- B** = direct evidence of breeding
- b** = indirect evidence of breeding
- t** = no evidence of breeding
- W** = overwintering
- w** = seen during winter, but not confirmed as overwintering

The lettered symbols are defined as follows:

BREEDING SEASON (February 16 – December 14)

For observations of birds during the breeding season, the letters "B," "b," or "t" are used to indicate the birds' breeding status.

"B" DIRECT EVIDENCE OF BREEDING

"B" is used to indicate direct evidence of breeding: evidence that eggs or young have been produced.

Breeding is not assumed simply by the presence of adults, singing and territorial behavior, copulation, or nest-building. "B" is used only if one or more of the following criteria are met:

1. Occupied nest - adult attending a nest with eggs or nestlings (incubating or brooding), or adults entering or leaving nest site in circumstances indicating an occupied nest (includes high nests or cavities, the contents of which cannot be seen).
2. Recently fledged young (of altricial species) incapable of sustained flight or downy young (of precocial species) restricted to the area by dependence on adults or limited mobility.
3. Adults attending young - adult feeding recently fledged young or carrying food for young, or adult carrying fecal sac.

4. Nest with egg(s) that can be clearly identified. The presence of cowbird eggs or young is confirmation of breeding for both cowbird and host species.

5. Used nest with eggshell, or just eggshell found (identification must be convincing for such records to be accepted, and cannot be based on the nest alone).

NOTE: Records of direct evidence of breeding ("B") are only accepted when at least one of the five criteria listed above is observed and information for a "B" designation is included in the Comments section of the Report Form. If no supporting information is given, the record will be designated a "b" (see following).

"b" INDIRECT or CIRCUMSTANTIAL EVIDENCE OF BREEDING

"b" is used to indicate indirect evidence of breeding. This status applies if one or more of the following criteria are met:

1. Singing males or territorial birds observed in suitable nesting habitat during the breeding season.
2. Courtship behavior or copulation.
3. Adults visiting a probable nest site.
4. Agitation behavior, distraction display, feigning injury, or anxiety call from an adult.
5. Nest building.
6. Physiological evidence of breeding (incubation patch or egg in oviduct) based on bird in hand.
7. Independent young of the year unaccompanied by adult (for non-migratory species or prior to normal migration).

"t" NO EVIDENCE OF BREEDING, NO BREEDING BEHAVIOR

"t" is used to indicate presence of any species (resident, migrant, or transient) that exhibits no breeding behavior at the time observed.

Behavioral activities that do not fit "B" or "b" should be considered "t." See "B" and "b" above to determine if a behavior constitutes direct or indirect evidence of breeding.

WINTERING SEASON (15 December- 15 February)

For observations of birds during the wintering season, the letters "W" or "w" are used to indicate wintering status.

"W" OVERWINTERING

"W" is used to indicate regular observations of the species during the winter period.

Regular is defined as at least 3 days between 15 December and 14 January and 3 days between 15 January and 15 February. "W" can be documented two ways: (1) an individual observer submits data with dates for when the bird was observed during the winter months, following the above criteria, or (2) multiple "w" records in the MBD database for the same LL and from the same winter

season are used to generate a "W", following the above date criteria. (Individuals submitting data need to include the dates for which the bird was observed during the winter months, 15 December - 15 February, in the Comments section of the Report Form.

"w" OBSERVED DURING WINTER SEASON, but NOT confirmed OVERWINTERING

"w" is used to indicate that the species was observed at least once between 15 December and 15 February, but not regularly during the winter season.

This information is taken from the following publication: Montana Bird Distribution Committee. 2012. *P.D. Skaar's Montana Bird Distribution*, 7th Edition. Montana Audubon, Helena, Montana 208 pp + foldout map.

For More Information on the Montana Bird Distribution Project:

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