

Criteria for Designation as a Member in the Canadian Migration Monitoring Network

In order to be designated as a Member of the Canadian Migration Monitoring Network, migration monitoring stations must satisfy the following criteria:

Migration monitoring

Definition: For the purposes of this MOU, “migration monitoring” is defined as any standardized operation that is judged by the CMMN-RCSM Steering Committee to have the capacity to contribute scientifically-meaningful data that can be used to further the understanding of bird migration -- especially when such data are gathered within the framework of a larger, network-wide environment. The scope of “migration monitoring” studies includes, but is not limited to, contributions that can lead toward an understanding of patterns of general stop-over ecology, population trends, other temporal aspects of migration (e.g. chronology/phenology), migrant energetics and physiology, and/or productivity/survivorship of migrants. The following guidelines are intended to reflect the stated Mission of the CMMN-RCSM.

1. The station must furnish evidence that it has established an adequate level of coverage over at least two migration seasons (spring and/or fall) in at least two consecutive calendar years immediately prior to its application for membership. The level of adequate coverage is dependent on geographic region, latitude, and species of interest and will be dealt with on a case-by-case basis. However, it is anticipated that the Steering Committee will require the following minimum criteria to be met in most cases:

- a) The station must run at least 5 days per week (including inactive periods due to weather) during a consecutive period of at least one month during either spring or fall; and
- b) The station must adequately monitor the migration of some species of landbirds migrating to or from breeding ranges within Canada, ensuring that the station is capable of making useful contributions to CMMN-RCSM-sponsored projects.

The current guidelines for ‘adequate’ are as follows:

- (i) station coverage spans at least 75% of the days in the target species' spring or fall migratory period (the site-specific span of dates within which the middle 95% of individuals occur);
- (ii) station records an average of at least 10 individual passage migrants of a species per season on an average of at least 5 separate days per season; and
- (iii) non-resident passage migrants make up the majority of individuals of monitored species each day.

(Note: Exceptions may be made to guideline (ii) for high priority and/or rare species).

2. Stations that band birds (along with relevant on-site station personnel) must hold a valid permit and must operate in accordance with the North American Banding Council’s “Bander’s Code of Ethics” (see Appendix 3). All stations are expected to meet or exceed the banding and training standards that are outlined in the guidance and training documents provided by the North American Banding Council (<http://www.nabanding.net/nabanding/pubs.html>). Though not required in all jurisdictions or by all institutions, stations are also encouraged to seek Animal Care Committee approval.

3. The station must operate in Canada, although exceptions will be considered on a case-by-case basis for stations that are located close to Canada’s border.

4. The station must agree to operate under a written protocol that includes the following eight elements:

- a) A brief statement of goals and objectives of the program. The main groups of birds (e.g. landbirds, diurnal migrants, neotropical migrants, species breeding in the forests of northern Canada) to be monitored should be indicated. Species known or believed to be adequately monitored (criterion 1) should be listed in an Appendix.
- b) A definition of the area being monitored, including a map or maps showing (where applicable) the boundaries of the count area, a census route, visible migration observation points, and net and trap sites.
- c) Definition of the daily time period(s) during which the count(s) (*sensu* Hussell and Ralph 2005) are to be conducted and (if applicable) upon which the derivation of estimated totals is to be based.
- d) A description of the methods used to produce a migration count, with particular attention to any procedures that are specific to the site.
- e) A description of procedures (if any) for recording stopover and resident individuals. It should include site-specific rules for determining which individuals are to be recorded as stopovers and residents. In order to monitor capture rates and detect potential changes in habitat, stations should also record the individual net in which each bird was captured.
- f) A description of record-keeping procedures.
- g) Statements specifying the number of qualified banders and assistants that are required to run the station, and the knowledge, skills and experience required of participants; and descriptions of training programs to bring inexperienced personnel up to the required levels.
- h) A description of the vegetation at the levels of net lane, site and surrounding lands, including photographs, and a plan and schedule designed to document vegetation changes. If an objective of the station is *population* monitoring of migrants, the protocol must include an assessment of vegetation succession and, if necessary, a management plan designed to minimize succession.

Institutional Arrangements

5. The station must have a long-term institutional arrangement that gives some expectation that it can be run for at least 5 years in the future. This could consist of non-profit organizational status or a formal agreement with an organization such as a university or research station or another non-profit organization. Regardless, there must be some form of oversight group, such as a Board of Directors or steering committee, responsible for operation of the station.

6. The station must have a reasonable expectation of secure tenure of the site (5+ years) through ownership of the land, written agreement with the landowner, or a record of historical occupancy.

Memorandum of Understanding

7. The station must sign a Memorandum of Understanding with the CMMN-RCSM Steering Committee and Bird Studies Canada concerning the responsibilities and commitments of the three parties as partners in CMMN-RCSM

Literature Cited

Hussell, D.J.T. and C.J. Ralph. 2005. Recommended methods for monitoring change in landbird populations by counting and capturing migrants. *North American Bird Bander* 30: 6-20.

This document is available at: http://www.klamathbird.org/lamna/Hussell_Ralph_NABB.pdf

Another version is available at: <http://www.bsc-eoc.org/download/Hussell-Ralph%20migmon.pdf>

or at: <http://www.fs.fed.us/psw/topics/wildlife/birdmon/pif/migmon.html>