



Eastern Canada Seabirds at Sea (ECSAS) standardized protocol for pelagic seabird surveys from moving and stationary platforms. 2012. Canadian Wildlife Service Technical Report Series No. 515.

Addendum A

ECCC-CWS standards for observers conducting seabird surveys at sea, and for trainers providing instruction on seabird survey methods

1. Background

Data on the distribution and abundance of birds at sea are needed to quantify and mitigate anthropogenic risks to marine birds offshore. The value of the data depend upon the capabilities of the persons collecting the data and the quality of training provided. This document outlines ECCC-CWS standards for seabird observers conducting seabird surveys from moving and stationary vessels and platforms, and provides a framework for the training of at-sea seabird observers. It also facilitates the acquisition of reliable survey data for use in the conservation and management of migratory birds under the jurisdiction of Environment and Climate Change Canada.

2. ECCC-CWS standards for seabird observers conducting surveys from moving and stationary vessels and platforms

2.1 Seabird observers conducting surveys at-sea during normal operational activities (i.e., not involved in Emergency Response) are expected to have:

- experience* observing and counting seabirds at-sea, with a good understanding of seabird behaviour and ecology as it informs proper species identification;
- ability to rapidly identify seabirds at sea in the North Atlantic in all plumages, in various lighting conditions, reduced visibilities, and in rough ocean conditions;
- formal theoretical training (see below for training standards) and a thorough understanding of the CWS standardized protocol for conducting seabird surveys at sea;
- experience travelling in boats and an ability to work in rough sea conditions without getting seasick;
- ability to stand for long periods of time, often under arduous conditions;
- ability to accurately record data on data sheets (or electronically) according to protocol, including information on vessel, weather conditions, and bird sightings;
- ability to work independently;
- good communication skills and the ability to live and work closely with ship's crew and staff for extended periods of time.



* Experience must include practical at-sea training with a qualified seabird observer (see section 2.2 below). At-sea training involves up to 5 days at sea conducting surveys in order to obtain an adequate number of detections to ensure adherence to protocol. Submission of survey data to ECCC-CWS for evaluation and verification that data meet CWS standards is required. Observers whose data do not meet standards will be asked to undertake additional training with qualified seabird observers.

2.2 Seabird observers conducting surveys at-sea during an Emergency Response (or those considered qualified to train new observers) are expected to have:

- all experience and abilities listed previously;
- recent and significant experience conducting seabird surveys at sea, defined as at least 15 days of at-sea surveys conducted within the past three years.

3. ECCC-CWS Training Standards for offshore seabird observers

3.1 The training provider shall:

- have a syllabus, training schedule and other relevant material to provide to trainees, to be reviewed by CWS at least four weeks prior to course delivery;
- maintain training records of course participants, individual evaluations, and dates of course delivery;
- facilitate an audit by CWS every three years to ensure training standards are met and materials are up to date;
- offer re-training opportunities at least once every three years.

3.2 All training courses will include:

- Classroom instruction (details provided below) on four seabird survey modules (Seabird Identification, ECSAS Protocol, ECSAS Database, and Quantifying Stranded Birds)
- Practical exercises for each module
- Evaluation of trainees for each module
- Stranded bird handling and documentation
- Equipment requirements
- Practical at-sea instruction

3.3 All training courses have the following minimum requirements:

3.3.1 Seabird Identification

- identification techniques (field marks, behavioural cues) for all common North Atlantic marine bird species as well as rarities, in various plumages and age classes
- ⇒ minimum half-day of instruction (although trainees would be expected to have prior knowledge and experience identifying marine birds)



3.3.2 ECSAS protocol – moving and stationary surveys

- Distance sampling theory and application
 - Measuring distance at sea
 - Counting birds on water and birds in flight ('snapshot' technique) – moving surveys
 - Interpreting special circumstances (i.e., large flocks and followers)
 - Understanding behavioural and environmental covariates
 - Counting birds – stationary surveys
 - Recording data – required fields and supplementary data
- ⇒ Minimum full day of instruction

3.3.3 ECSAS Database

- Installation of ECSAS Mobile database
 - Entering cruise, watch, and sightings data
 - Viewing and editing data
 - Summarizing data using built-in functions
 - Backing up database
- ⇒ Minimum full day of instruction

3.3.4 Quantifying stranded birds

- Systematic search requirements (general)
- Handling live and dead stranded birds
- Documenting live and dead stranded birds (and search effort)

3.3.5 Practical at-sea instruction with an experienced observer

- Integrating identification techniques, distance sampling, snapshots for flying birds
 - Recording and entering data at sea
- ⇒ Minimum of half-day at-sea practical instruction