

Marsh Monitoring Program - Contact and Route Information

Please complete and return original but keep a photocopy for your own reference.



Route # Observer # Observer Name

Year

Marsh (choose only one) Fresh water Brackish water Salt water

Corrections

Section A: Is the contact information above correct? Yes No

If No, please provide the correct information in the "Corrections" box to the right



Is there at least one station of your route that is regularly inundated by the waters of the St. Lawrence River, such as the tide? Do not consider the affluent rivers of the St. Lawrence as being part of the St. Lawrence River. Yes No

What is the status of your route this year? same as last year modified from last year new route

If this is a **new or changed route**, please provide the information in Sections B & C. Alternatively, please mark station locations directly onto a copy of a standardized topographic map and return a copy with your data, (detailed instructions provided below). If this is not a new or modified route, please do not fill out Sections B and C. If you change station locations please do not re-use station identifiers.

Section B: Route Information

Route/Marsh Name: _____

Closest town to route: _____ Province _____

Section C: Station Information

From GPS Web or Topographic Map

(Note: If you are unable to provide this information, then leave this section blank, but do send us a map).

Station Letter NAD 27 NAD 83

UTM Zone Easting Northing

Please include all the characters for the UTM coordinates.

Latitude Deg/Min/Sec Longitude Deg/Min/Sec

OR

Station Letter NAD 27 NAD 83

UTM Zone Easting Northing

Please include all the characters for the UTM coordinates.

Latitude Deg/Min/Sec Longitude Deg/Min/Sec

OR

Identifying Locations of Stations

If you did not receive a copy of a topographic map with your training kit, please contact us and we'll send you one. Be sure to give us enough details so we can find the general location of the marsh.

Once you have your map, go at your survey site and identify the best you can the locations where you'll conduct your surveys (i.e. focal points). Keep a copy of the map for your reference and return the original with your data.

Marsh Monitoring Program - Contact and Route Information

	Station Letter <input style="width: 20px; height: 20px;" type="text"/>	<input type="radio"/> NAD 27	<input type="radio"/> NAD 83	
UTM	Zone	Easting	Northing	
	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	
	Please include all the characters for the UTM coordinates.			
	Latitude Deg/Min/Sec	Longitude Deg/Min/Sec		
OR	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	

	Station Letter <input style="width: 20px; height: 20px;" type="text"/>	<input type="radio"/> NAD 27	<input type="radio"/> NAD 83	
UTM	Zone	Easting	Northing	
	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	
	Please include all the characters for the UTM coordinates.			
	Latitude Deg/Min/Sec	Longitude Deg/Min/Sec		
OR	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	

	Station Letter <input style="width: 20px; height: 20px;" type="text"/>	<input type="radio"/> NAD 27	<input type="radio"/> NAD 83	
UTM	Zone	Easting	Northing	
	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	
	Please include all the characters for the UTM coordinates.			
	Latitude Deg/Min/Sec	Longitude Deg/Min/Sec		
OR	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	

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UTM	Zone	Easting	Northing	
	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	
	Please include all the characters for the UTM coordinates.			
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UTM	Zone	Easting	Northing	
	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	
	Please include all the characters for the UTM coordinates.			
	Latitude Deg/Min/Sec	Longitude Deg/Min/Sec		
OR	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	

Identifying Stations

Identify your stations using capital letters, usually "A" through "H". If you abandon a station do not re-use its station ID. For example, if your original route had five stations (A-E) but you abandon C because of noise levels, feel free to "replace" it but call the new station F. Remember that stations must be surveyed in the same order at each visit. If your survey order is not sequential (e.g. DCBA instead of ABCD), please send us a note so we can consider this information.

Providing Coordinates

Coordinates can be obtained from topographic maps, from computer-generated mapping programs or from a Geographic Positioning System (GPS). You can provide coordinates in UTM's or in Latitude and Longitude. *In all cases*, let us know whether the information came from the most recent North American Datum (NAD) 83 or the older NAD 27 maps, because the coordinates are different between the two-grid systems. The NAD is always provided on topographic maps, usually in small print at the bottom of the map (e.g., North American Datum 1927).

Determining Coordinates Using a GPS

If you have a GPS unit, record the location while you are on site. Set the device to NAD 83, and record the UTM Zone, all 6 digits of the Easting and all 7 digits of the Northing. If your GPS unit gives you 7 Digits for Easting, do not record the leading "0". For example, if your GPS gives you: UTM 13 0625693 4047724, you will write 13 for the Zone, 625693 for Easting and 4047724 for Northing. Alternatively, record the Latitude and Longitude.

When You're Done...

Copy your data forms and map for your own files, then return all **originals** by 31 July to:

Bird Studies Canada
 Québec Marsh Monitoring Program
 801-1550, avenue d'Estimauville
 Québec (Québec) G1J 0C3

Please do not fold the originals
 Please use the return envelope provided

Marsh Monitoring Program - Bird Route Summary Form

Route #

Observer #

Observer Name

Visit 1

Visit 2

*Please print with BLOCK CAPITALS, remain within the boxes and mark each individual choice by filling in the corresponding circle. Please use pen (not felt tip).

Station (A-H)

Day

Month

Year

Station Start Time (24h)

Number of Stations

Cloud Cover (0-10)

Beaufort Wind Scale

Temperature

°C

Background Noise Code (0-4):



FOCAL SPECIES

Species code	Responded During: (please fill choice circle)											Position	Outside		
	Before/After Survey/Period	Pass. min. 0-1	Pass. min. 1-2	Pass. min. 2-3	Pass. min. 3-4	Pass. min. 4-5	LEBI min. 5-6	SORA min. 6-7	VIRA min. 7-8	MOOT min. 8-9	PBGR min. 9-10			Pass. min. 10-15	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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- Codes**
 Pied-billed Grebe - **PBGR**
 American Bittern - **AMBI**
 Least Bittern - **LEBI**
 Yellow Rail - **YERA**
 Virginia Rail - **VIRA**
 Sora - **SORA**
 Common Moorhen - **COMO**
 American Coot - **AMCO**
 Am. Coot/C. Moorhen - **MOOT**

Comments:

OTHER SPECIES

Species name	# Observed*			
	0-5min	5-10min	10-15min	Out.**
Great Blue Heron				<input type="radio"/>
Wood Duck				<input type="radio"/>
Mallard				<input type="radio"/>
Ring-billed Gull				<input type="radio"/>
Black Tern				<input type="radio"/>
Mourning Dove				<input type="radio"/>
Belted Kingfisher				<input type="radio"/>
Eastern Kingbird				<input type="radio"/>
American Crow				<input type="radio"/>
Tree Swallow				<input type="radio"/>
Marsh Wren				<input type="radio"/>
American Robin				<input type="radio"/>
Yellow Warbler				<input type="radio"/>
Common Yellowthroat				<input type="radio"/>
Song Sparrow				<input type="radio"/>
Swamp Sparrow				<input type="radio"/>
Red-winged Blackbird				<input type="radio"/>
Common Grackle				<input type="radio"/>
American Goldfinch				<input type="radio"/>

Species name	Species Code	# Observed*			
		0-5min	5-10min	10-15min	Out.**
					<input type="radio"/>
					<input type="radio"/>
					<input type="radio"/>
					<input type="radio"/>
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					<input type="radio"/>

* #Observed = The number of individuals observed and/or flying actively (foraging) over the station.
 **Out. = Outside (species seen or observed outside the station or seen flying through without landing.)

0958327734 Marsh Monitoring Program-Habitat Description Form

Please print with BLOCK CAPITALS, remain within the boxes and mark each individual choice by filling in the corresponding circle. Please use pen (not felt tip).



Day Month Year Route # Station
 2 0 (A - H)

Observer # Observer Name

A % of major habitats in 100 meter radius station area

herbaceous emergent vegetation cover:
 large patches of open water/floating plants:
 exposed mud/sand/rock:
 trees:
 shrubs:
 Total: 1 0 0

Note:
 These must sum to 100%



B Floating plant cover in open water zones (fill in one)

none slight moderate dense
 unknown not applicable

C Wetland Permanency (fill in one)

permanent semi-permanent seasonal

D Overall marsh size (fill in one)

tiny small medium large huge

E Area within 100 meters behind you is mainly (fill in one)

wetland field forest urban other

F Human influences affecting sample area (fill in one or more)

none dykes channels roadside sewage lagoon
 urban pollution industrial agriculture
 natural/protected area
 other

G Dominant Emergent Vegetation

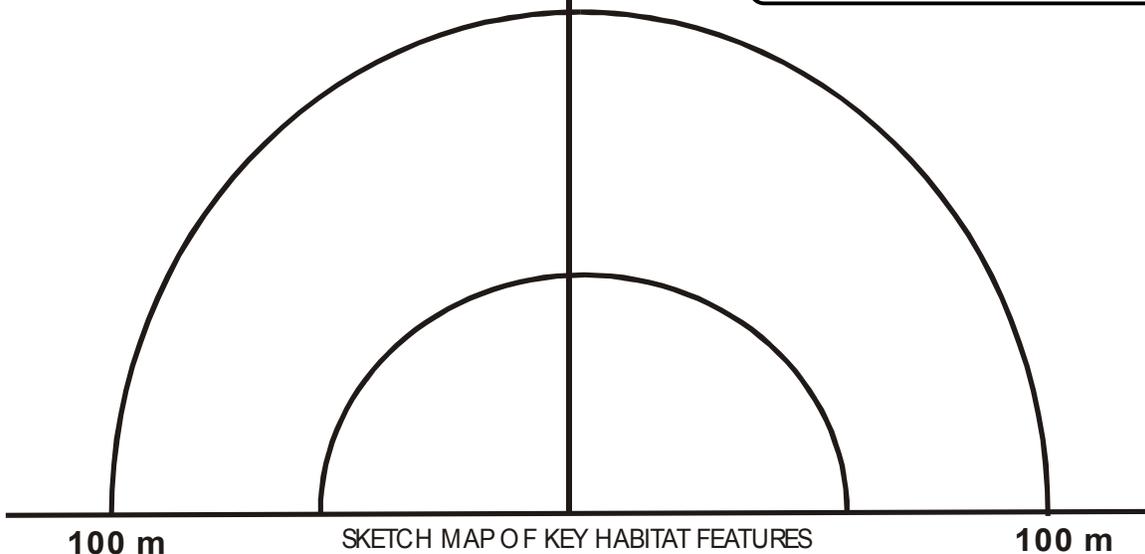
Step 1: Identify the herbaceous emergent plants that dominate the station (see section A).
 Step 2: Of the total percent emergent herbaceous vegetation cover, select the top 4 and estimate the percent of their contribution.

cattail (<i>Typha</i>).....	<input type="text"/>
reeds (<i>Phragmites</i> and <i>Phalaris</i>)....	<input type="text"/>
grasses and grasslike sedges.....	<input type="text"/>
rushes/bulrushes (<i>Juncus/Scirpus</i>)	<input type="text"/>
purple loosestrife (<i>Lythrum</i>).....	<input type="text"/>
flowering rush (<i>Butomus</i>).....	<input type="text"/>
arrowhead (<i>Sagittaria</i>).....	<input type="text"/>
smartweed (<i>Polygonum</i>).....	<input type="text"/>
bur-reed (<i>Sparganium</i>).....	<input type="text"/>
wild rice (<i>Zizania</i>).....	<input type="text"/>
pickerel weed (<i>Pontederia</i>).....	<input type="text"/>
other <input type="text"/>	<input type="text"/>
other <input type="text"/>	<input type="text"/>
other <input type="text"/>	<input type="text"/>

Note:
 - Sums of percentages must equal or be less than 100%, never more.
 - Please DO NOT include woody (eg. shrubs) or floating (eg. waterlily) plants in this section



Compass Direction



Landmark:

You do not need to access the entire station area to describe the habitat. Merely stand at the focal point and record what you see within the bounds of the 100 m radius station area. The values you provide are **estimates** only and you don't need to spend a lot of time trying to calculate actual percentages. See the Marsh Monitoring Program Training Manual for additional details.

Completing the left-hand side of the form (Sections A through F)

- (A) Scan the 100 m radius sample area. Estimate the **percent of the total area** that is covered by emergent vegetation, open water (including floating plants), exposed mud/sand/rock, trees, and shrubs. These values must add up to 100%.
- Definition: "open water" includes any and all pools of water that are at least the size of a standard sheet of plywood (4 x 8 ft). It supports little if any **emergent** vegetation. However, it may contain **floating plants**. As a rule of thumb, if you could float a small canoe in it (and maybe even paddle around a little), it is probably "open water."
- (B) Look again at the open water zones. Categorize the amount of **floating plant cover**. If there is no open water, fill in the circle for "not applicable." Slight: less than 25%, moderate: 26-50%, dense: greater than 50%.
- (C) **Wetland permanency** is categorized according to the following definitions:
permanent - almost never dries up; water is usually quite deep (knee to chest deep). Tidal marshes in the St. Lawrence River should be identified in this category.
semi-permanent - can dry up in some years of low precipitation (or if water level is periodically drawn down); water is usually fairly shallow (not much more than knee deep)
seasonal - usually flooded in spring and early summer, but tends to dry up in late summer or in dry years. Even when flooded, the water is shallow (not much more than calf deep)
- (D) Estimate the **size of the entire contiguous marsh complex**, excluding large bodies of navigable water like lakes and bays. For your information, one hectare (about 2.5 acres) measures 100 meters x 100 meters (e.g. a "tiny" marsh). 100 hectares is 1000 meters x 1000 meters (e.g. a "huge" marsh).

tiny - between 1.5 and 2.5 hectares (3.5 - 6 acres)	large - between 25 and 50 hectares (60 - 125 acres)
small - between 2.5 and 5 hectares (6 - 12 acres)	huge - greater than 50 hectares (>125 acres)
medium - between 5 and 25 hectares (12 - 60 acres)	

- (E) Classify the **land use** (to 100 m) behind you as you face the station area. Choose only one category.
- (F) Identify the obvious **human influences** that may be affecting the station area. Choose as many categories as you think apply.

Completing the right-hand side of the form (Section G)

(G) The Dominant Emergent Vegetation Box

The estimates you make in this section are based on the **total area covered by herbaceous emergent vegetation only** (ignore open water/floating plant and shrub/tree zones). Scan the area and decide which kinds of herbaceous emergent vegetation dominate the area. Limit yourself to the **top four most common** species. Of the total herbaceous emergent vegetation cover, what proportions do each of these dominant plants occupy? (Because other less-common plants may be present, the dominants **do not need to add up to 100%**).

In some marshes, virtually all of the herbaceous emergent vegetation may be represented by a single dominant species (e.g. cattail = 100%) or by a couple of species (e.g. cattail =75%, grass = 20%). If so, you don't need to list any other species in the Dominant Emergent Vegetation box. As a general rule of thumb, any species that accounts for less than about 10% of the cover really can't be considered as a dominant. If a dominant species is not listed in the box, list it under **other** (be sure it is **herbaceous** (non-woody) and **emergent** (not floating)). If you can't identify it, take your best guess, followed by a question mark (e.g. "Milkweed? = 25%").