
**Reconnaissance (1:20,000)
Fish and Fish Habitat Inventory:
Fish Collection Form
(and Individual Fish Data Form)
Field Guide**

Prepared by
Ministry of Environment
Ecosystems Branch
for the
Resources Inventory Standards Committee

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For further information about the Resources Information Standards Committee, please access the RISC website at:
<http://ilmbwww.gov.bc.ca/risc/index.htm>

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INTRODUCTION

This *Field Guide* provides instructions for recording relevant fish sampling data required on the *Fish Forms* (Fish Collection Form and the Individual Fish Data Form). Only the text directly relevant to fish sampling is included in the *Field Guide*. This *Field Guide* includes information on definitions, methods, and recording procedures. More detailed standards regarding the inventory can be found in the *Reconnaissance (1:20 000) Fish and Fish Habitat Inventory: Standards and Procedures Manual*. Additional information on methodology for *Fish Form* field data collection can be found in the *Reconnaissance Level Fish Sampling Toolkit* at http://www.env.gov.bc.ca/fish/pdf/fish_sampling.pdf.

Fish Collection Form information that is required for the minimum data submission standards of a BC Scientific Fish Collection Permit is described on the Fish Data Submission website at http://www.env.gov.bc.ca/fish_data_sub/index.html.

This *Field Guide* is organized into sections that correspond to the fish forms. Complete all fields of the card for which it is possible to collect data. When a particular field cannot be completed for the field, strike through the blank field or write N/A. This indicates that the field is not applicable. Explain why a particular field was not completed, reference in the comment indicator box and record in the comments section.

Some *Fish Collection Form* sections, and the *Individual Fish Data Form* have comment indicator box(es) which are shaded light red. These boxes correspond to comments which are either entered in comments fields within the section or in the *Comments* section on the *Fish Forms*. General comments applicable to the fish sampling event may also be added to the *Comments* section on the forms.

There are a variety of methods used to collect data. Always record the method used within the method box (MTD or mtd) provided. Refer to the *Appendix* for codes not explained in the body of the *Field Guide*.

FISH COLLECTION FORM

REFERENCING INFORMATION (I)

Gazetted Name

Definition: The official name of the lake or stream being surveyed as listed with *BC Geographical Names*.

Method: Determine from *BC Geographical Names* at <http://lmbwww.gov.bc.ca/bcnames/>.

Recording Procedure: Record official name. If not official, enter "unnamed."

Local (Alias)

Definition: An unofficial or locally used lake or stream name.

Method: Can be obtained from old lake summary reports, regional MELP offices, etc.

Recording Procedure: Record the local/alias name.

Lake/Stream/Wetland

Definition: This describes the waterbody type.

Method: Visually assess the waterbody on site.

Recording Procedure: Check the appropriate box. If fish collection sites are located in a stream channel located within a wetland area, record the site as a stream.

Watershed Code

Definition: A unique, 45-digit number assigned to the watersheds in British Columbia.

Method: Obtain using the *BC Watershed Atlas*. See *User's Guide to the British Columbia's Watershed/waterbody Identifier System, RISC (2004)*, or obtain from *Fisheries Inventory Data Queries (FIDQ)* at <http://a100.gov.bc.ca/pub/fidq/main.do>.

Recording Procedure: Record the complete code to the first set of zeros.

Waterbody Identifier (ID)

Definition: The waterbody identifier is an alphanumeric, nine string of characters that uniquely identifies a waterbody within the province of British Columbia (*lakes only*). It is composed of five numeric digits followed by a four-letter acronym of the parent watershed group.

Method: See *User's Guide to the British Columbia's Watershed/waterbody Identifier System, March 31, 2004, Version 3.0*.

Recording Procedure: Record the complete nine-character alphanumeric Watershed identifier.

NOTE: Record ILP Map # and ILP # when no watershed code and/or waterbody identifier is available.

Interim Locational Point Map Number (ILP MAP #)

Definition: The number of the mapsheet used to assign the interim locational point (also referred to as interim locator or interim location identifier).

Method: Read from the map. See *User's Guide to the British Columbia's Watershed/waterbody Identifier System, March 31, 2004, Version 3.0*.

Recording Procedure: Record the mapsheet number (e.g., 92L.005).

ILP #

Definition: A number unique to any particular point on the mapsheet. It is used to identify waterbodies lacking referencing codes and is assigned at the outlet.

Method: See *User's Guide to the British Columbia's Watershed/waterbody Identifier System, RIC (1997)*.

Recording Procedure: Record the ILP Number (e.g., 00091).

Site/Lake Card Attached

Definition: Fish collection form may be used for other inventory types and may not be directly associated with a site card or a lake survey form. This field identifies whether or not a Site Card or Lake Card has been completed for the sampling site.

Recording Procedure: Check yes or no.

Project Identification Code (Project ID)

Definition: A unique identification code defined by BC Fisheries for a particular project.

Method: Obtain from contract monitor.

Recording Procedure: Record the unique project ID code in the appropriate box.

REACH #

Definition: A reach is a channel segment with relatively repetitious and homogenous sequence of physical processes and habitat types (e.g., homogenous slope, discharge, habitat, channel type, and riparian features); lakes and wetlands are also considered reaches for the purpose of planning. Reach number is the number given to individual reaches.

Method: The reach number is assigned to the reaches in a sequential, upstream, ascending order, starting at (1) at the downstream end of the stream. If an additional reach needs to be added, a decimal system is used. For example if it is discovered in the field that reach 2 was really three reaches, then the reach would be renumbered using the decimal system. The recommended reach renumbering in this case would then be 1, 2.1, 2.2, 2.3, 3...

Recording Procedure: Record the reach number. If additional reaches are identified during fieldwork (after planning has been completed), they are recorded as (1.1-), (1.2-), etc.

Fish Permit #

Definition: The Scientific Fish Collection Permit is issued by the Ministry of Environment (MoE), for the collection of fish for scientific purposes from non-tidal waters.

Recording Procedure: Record the fish permit number

Date

Definition: The start and completion dates for sampling techniques spanning multiple days.

Recording Procedure: Record dates as Year (YYYY), Month (MM) and Day (DD) (e.g., 1998/06/24).

Re-sample

Definition: If inaccurate or insufficient data is gathered, re-sampling may be required. This field refers to sites identified by the field crew for re-sampling at a later date.

Method: Consider whether or not a site requires re-sampling based on if the data is inaccurate or inadequate; proximity to known fish bearing waters; habitat quality; seasonal factors; and, geographic location of the site.

Recording Procedure: Check the box if re-sampling is required.

SITE/METHOD/NUMBER - (II)

NOTE: The **site** refers to an area of a stream reach, wetland or lake where the sampling is done. Method relates to the actual gear type deployed within the site and is recorded as a method code, for example, **MT** for minnow trap. (Method) number is a sequential number assigned to various gears of one type, for example, **MT1** and **MT2** for the first and the second minnow trap used at a site.

Site #

Definition: A number associated with a unique sampling area/location of a stream reach, wetland or lake. For streams, the site number will probably correspond to the site card. However, lakes may have multiple fish sampling sites.

Recording Procedure: Record the site number.

NID numbers: Assigning NIDs is a method of identifying features on a mapsheet. Each feature identified on a mapsheet is assigned a five-digit number, unique to that mapsheet, such as 00001, 00002, etc. The mapsheet number followed by this feature identifier number forms a complete NID reference code that is unique to the project. Only the unique, five-digit feature identifier is marked on the mapsheet, adjacent to each feature. On the data forms, however, both the mapsheet number and the feature identifier are recorded in their respective, corresponding columns, as explained below.

NID Map #

Definition: The number of the mapsheet on which the specific NID number occurs.

Method: Read from map.

Recording Procedure: Record the mapsheet number (e.g., 92L.005).

NID

Definition: The unique five-digit number that identifies the sample site on a mapsheet.

Recording Procedure: Record the five-digit NID number unique to mapsheet in the corresponding NID Map No. column (e.g., 00012).

Site UTM

Definition: The Universal Transverse Mercator (UTM) coordinates that identify the location of the fish sampling site.

Method: Interpret from TRIM, or record from GPS.

Recording Procedure: Record UTM (Zone/Easting/Northing) to metre level, if possible (e.g., 10.697501.598412).

Method/Method # (MTD/NO.)

Definition: The fish capture method and identifying numbers.

Method and Recording Procedure: Record the appropriate fish capture or observation method code followed by the appropriate sequential number in the right hand side of the field (e.g., If 3 minnow traps and 1 electrofisher are used at the site, enter these as MT I 1, MT I 2, MT I 3 and EF I 1). If the method is EF (electrofishing), then the section on Electrofishing specifications must be used.

Code	Description	Code	Description
AR	Angler report	MT	Minnow trapping
AG	Angling	SN	Seining
CR	Creel census	SW	Swimming/Snorkeling
DC	Dead capture	TN	Trap net
DN	Dip netting	UN	Method unknown
EF	Electrofishing	VO	Visual observation above water
GN	Gill netting		

Stream Condition

Note: The following three fields (e.g., temperature, conductivity, and turbidity) are applicable to streams only.

Temperature (Temp) - (°C)

Definition: The temperature of the water in degrees Celsius (°C).

Method: Varied.

Recording Procedure: Record the water temperature to the nearest 0.1 °C.

Conductivity (Con) - (µS/cm)

Definition: A measure of the ability of a solution to carry an electrical current, dependent on the total concentration of dissolved salts in water.

Method: Varied.

Recording Procedure: Record the conductivity to the nearest 1 µS/cm, standardized to 25 °C as calculated from a nomograph, or as given by instrument employing automatic temperature compensation.

Turbidity (Turb.)

Definition: A subjective measure of water clarity, turbidity indicates the concentration of suspended sediments and particulate matter in water.

Recording Procedure: Record the code.

Code	Description
T	Turbid
M	Moderately turbid
L	Lightly turbid
C	Clear

FISH SUMMARY (III)

This section records a summary of the characteristics of the fish captured in the site.

Notes:

1). *The total number (Total #) of each species captured in each sampling "event" is recorded in the Fish Summary section of the fish collection form. This is the total number of fish captured, including those for which individual fish data were recorded. Sampling "events" are referenced by site #, method*

and number (MTD / #) (e.g., Site # = 1, MTD = EF, # = 1).

2). Recording by haul or pass number, stage, or age group within species is allowed but not required.

3). *The fish summary is also used for recording results of any visual observation methods, such as a snorkel survey.*"

Site #; Method # (MTD/#)

Recording Procedure: Transfer the corresponding information from section (II) (Site #, MTD / NO.).

Haul # /Pass # (H/P)

Definition: Haul refers to the number of hauls performed using traps or nets at the site. Pass refers to the number of electrofishing passes made through the site where fish were captured.

Recording Procedure: Record the haul or pass number.

Species

Definition: The species name of the fish captured.

Recording Procedure: Identify and record all fish captured using the *Field Key to the Freshwater Fishes of British Columbia*, RIC (1996) and the fish species codes.

Record UN when a fish species cannot be identified. Record a comment (e.g., possible identification) and collect and submit a voucher specimen.

Stage

Definition: Life stage of the fish based on the level of maturity.

Recording Procedure: Record the appropriate code.

Code	Description
F	Fry: Young fish newly hatched after yolk has been used up and active feeding commenced.
J	Juvenile: Sexually immature.
P	Parr: Young salmon before its first migration seaward.
A	Adult: Sexually mature and/or ready to spawn
NS	Not specified

Age

Definition: Age (in years) is determined using aging structures (scales).

Method: Visually approximate.

Recording Procedure: (optional). It is often left blank in stream inventory although the age class may be obvious from length frequency tall form in the case of juvenile captures. Record the determined age of the fish as (e.g., 0+ or 1+).

Total #:

Definition: The total number of a particular fish species captured (or observed) within the sampling site for all hauls or passes using the method described.

Method and Recording Procedure: Count and record the total number.

Minimum length (Min. Length) and Maximum Length (Max. Length):

Definition: Minimum length is the length of the smallest fish captured. Maximum length is the length of the largest fish captured.

Method: Measure from the tip of the nose to the fork in the tail on salmonids and from the tip of the nose to the end of the tail in all fish species that do not have forked tails.

Recording Procedure: If only one specimen of a particular fish species is captured, enter the numeric value (length in mm) into both the Minimum and Maximum Length fields.

Fish Activity (Fish Act.):

Definition: The activity of the fish at the time of capture.

Recording Procedure: Record the appropriate code.

Code	Description
M	Migration including adult fish traveling to spawning areas or other streams or juvenile fish traveling to estuaries or other streams or lakes.
S	Spawning including adult fish actively depositing or fertilizing eggs in spawning beds.
I	Incubation including eggs/alevins in gravel (presence of redds within the site).
R	Rearing including fish actively feeding or resting.

GEAR SPECIFICATIONS (IV)

A. Gear Settings

Site #; Method # (MTD/#)

Recording Procedure: Transfer the corresponding information from section (II).

Haul # /Pass # (H/P)

Recording Procedure: Record the number of the Haul (traps or nets) and Pass (electrofishing).

Date/Time In

Recording Procedure: Record the date and time sampling commenced. For date use MM/DD format and for time use 24-hour clock.

Date/Time Out

Recording Procedure: Record the date and time sampling was completed. (The time the trap or net was picked-up.) For date use MM/DD format and for time use 24-hour clock.

B. Net/Trap Specifications

Net type

Definition: Nets can be floating or sinking.

Recording Procedure: Record the type of net used.

Code	Description
FL	Floating (the top of the net is at the water surface).
SK	Sinking (the top of the net is below the water surface).

Length

Definition: Length of net in which fish can be captured.

Recording Procedure: Record the fishing length of the net or trap used in metres. This field does not apply to minnow traps.

Depth

Definition: Maximum fishing depth of net/trap from surface.

Recording Procedure: Record the fishing depth in metres.

Mesh size

Definition: Use of standard gill net gangs (a variety of stretched mesh size nets arranged in a sequence in one net) or individual mesh panels.

Method: For individual meshes, determine the stretch measure of the mesh. Take stretch measurements from the beginning of a knot to the beginning of the opposite knot when the mesh is stretched out. Note: Some nets are considered individual panels.

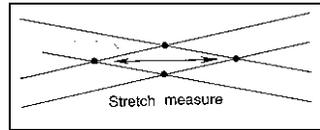


Figure 1. Stretch measure

Recording Procedure: Record the mesh size in mm.

Code	Description
ST	Standard - 6-panel gill net of standard configuration.
IN	Individual mesh panel. Enter stretched mesh size in comments.

Set

Definition: The waterbody zone in which the net or trap is set.

Recording Procedure: Record the zone.

Code	Description	Code	Description
BT	Bottom	SU	Surface
MD	Mid-water	VR	Variable

General Habitat (Hab.)

Definition: The general habitat in which the net or trap is set.

Recording Procedure: Record the habitat.

Code	Description
P	Pelagic (open waters of lakes)
L	Littoral (region along the shore)
PL	Both

ELECTROFISHER SPECIFICATIONS (V)

Notes on Electrofisher Settings:

1. When electrofisher settings are changed during a sampling pass, record the justification for changing the settings. Reference the comment(s) in the *Comments Section*.
2. If the settings are changed during a pass reset, record as the same site and pass number. Record the EF seconds and settings for all the different combinations used and the stream length sampled at those settings. Record a justification in the *Comments Section*.
3. If the settings are changed and the crew re-fishes the area covered by the previous settings, record the length and setting used in the first pass, and record the additional sampling as the same site but as a separate pass with different settings, EF seconds and EF length.
4. When settings are ranges, enter the average of the range or where there are code (e.g., J1) enter values in the *Comments Section*.
5. The EF settings are too high if fish appear injured (e.g., burn marks, flared gills or broken spine).
6. The settings may be too low if no fish are captured but are observed or the area has high quality habitat.
7. Refer to the electrofisher manual or to the notes from the electrofishing safety-training course for potential setting combinations.

Site #; Method # (MTD/#)

Recording Procedure: Transfer the corresponding information from section (II).

Pass

Recording Procedure: Record the electrofishing pass number(s).

Time In

Recording Procedure: Record the time sampling commences. Use 24-hour clock.

Time Out

Recording Procedure: Record the time sampling ended. Use 24-hour clock.

Electrofishing Seconds (EF Sec.)

Definition: The total electrofishing time in seconds for one pass.

Method: Obtain the EF seconds, as read directly from the display on the backpack electrofisher unit. Reset this counter after each electrofishing pass (see shocker manual for details on how to reset).

Recording Procedure: Record electrofishing time in seconds.

Length

Definition: The linear length of the electrofishing pass.

Method: Measure the length over which electrofishing was employed.

Recording Procedure: Record the linear length of the electrofishing pass to the nearest 1m.

If fish sampling is conducted outside the sample site to evaluate fish presence, the electrofishing pass length will be greater than the site length. Extend the site length and evaluate and record the physical and habitat features of the Site Card based on the entire site length, or, add an extra fish-sampling site within the reach (not accompanied by Site Card measurements).

Width

Definition: The linear width of the zone of stream in which electrofishing was conducted. This may be smaller than the wetted width due to hazardous terrain or the concentration of effort in sections of the site.

Method: Estimate the average width of the zone shocked in the EF pass.

Recording Procedure: Record the average width of the electrofishing pass to the nearest 1m.

Enclosure (Encl.)

Definition: An area enclosed with stop nets or natural barriers to prevent fish escaping capture during electrofishing.

Method and Recording Procedure: Describe the type of enclosure used and record the code.

Code	Description
O	Open – No stop nets or natural barriers
C	Closed – Stop nets or natural barriers up or downstream from site
PE	Partially enclosed – Only downstream stop net

Voltage

Definition: The electric potential or the potential difference used during the electrofishing pass expressed in Volts.

Method and Recording Procedure: Record the voltage setting employed.

Frequency (Freq.)

Definition: The number of pulses per second expressed in Hz.

Method: Refer to the electrofisher manual for how to determine frequency. Some electrofisher models offer settings with varying frequency.

Recording Procedure: Record the frequency or range of frequencies employed.

Pulse

Definition: Pulse width is the amount of time the current is turned on during one pulse (e.g., pulse width), as expressed in ms.

Method: Refer to the electrofisher manual to determine the pulse width. Some electrofisher models offer settings with varying pulse widths.

Recording Procedure: Record the pulse width setting or the range of pulse widths employed.

Make

Definition: The name of the company which manufactured the electrofishing equipment (e.g., Coffelt (C) or Smith-Root (SR)).

Method: Locate the make on the electrofisher.

Recording Procedure: Record the name of the manufacturing company.

Model

Definition: There are often different models of electrofishers available from each company and models will differ.

Method: The model will usually be written on the electrofisher.

Recording Procedure: Record the model number of the electrofishing equipment used in the sampling procedure.

COMMENTS (VI)

Definition: Comments from the fish sampling event, that apply specifically to the *Gear Specifications* and *Electrofishing Specifications* sections of the *Fish Collection Form*, or in general to the fish sampling event.

Method: Make note of comments during the fish sampling event.

Recording Procedure: Record comment number in the light red comment indicator box(es) and write a correspondingly numbered comment in the provided space.

INDIVIDUAL FISH DATA FORM

Individual fish information is recorded for a sample of all species captured in the site where large numbers are captured. The sample for each species captured must cover the range of individual fish captured, and must be sufficient to provide results appropriate to the survey objectives.

Completion requirements for this form vary according to project requirements. Individual fish data is recorded on the Individual Fish Data card. Total numbers are recorded in the summary section of the *Fish Collection Form*.

Fish Collection Form

Definition: The serial number printed on the lower margin of the back of the fish collection form.

Recording Procedure: Transfer the fish collection form number (e.g., N004701).

Site #; Method # (MTD/#)

Recording Procedure: Transfer the corresponding information from section (II) of the Fish Collection Form.

Haul # / Pass # (H/P)

Recording Procedure: Transfer the Haul or Pass number, in which the fish was captured, from the appropriate section of the Fish Collection Form.

Species (Spec.)

Recording Procedure: Identify the fish using the *Field Key to the Freshwater Fishes of British Columbia*, RIC (1996) and record on the form using the fish species code (refer to Appendix). If species is unknown, record species as UN until the voucher specimen can be identified.

Length

Definition: The key measurement for a reconnaissance survey.

Method: Determine the type of length measurement required from the table given below. Measure fork length (the length of a fish (in mm) from nose tip to fork of tail (median caudal fin rays) of fish with forked tails (e.g., salmonids). Measure total length (the distance from the most anterior part of the head to the tip of the longest caudal fin ray) of fish that do not possess a forked tail.

Recording Procedure: Record the fork length (FL) or the total length (TL), in mm, of each fish sampled.

Fork Length		Total Length
Goldeyes	Smelts	Catfish
Grayling	Sturgeon	Cod
Herrings/shad	Suckers	Flounders
Minnnows	Sunfish/Bass	Lampreys
Perches	Troutperch	Mosquitofish
Pike	Whitefish	Sculpins
Salmonids		Sticklebacks

Weight

Fish weights are project specific and need not be recorded for all fish described in the length sample. Record weights only for larger individual fish, in grams (to the nearest 1.0 g).

Sex

Definition: The gender of the fish captured.

Method: Determine the gender of each fish sampled, if possible. If the fish is ripe and ready to spawn, sex may be easily determined by secondary (phenotypic) sexual characteristics. Internally examine using sacrificed specimens (not voucher specimens) where maturity cannot easily be determined by external examination.

Recording Procedure: Record the gender.

Code	Description
M	Male
F	Female
U	Undetermined

Maturity (Matur.)

Definition: Life stage of the fish.

Method: Visually estimate. Internally examine using sacrificed specimens where maturity cannot easily be determined by external examination.

Recording Procedure: Record fish maturity.

Code	Description	Code	Description
IM	Immature	SP	Spawning
MTC	Maturing	ST	Spent
M	Mature	U	Undetermined

Age structure

Definition: Structures on fish used to determine age.

Method: Take aging structures (scales or fin ray clippings) from several representatives of each size group of each sport species. Collect otoliths, cleithrum and operculum from an individual fish if the fish dies during the capture, measurement, or release procedures.

Recording Procedure: Record the code for the aging structure collected. Number, preserve and submit the sample for further ageing analysis by a qualified fish aging structure expert.

Age Sample #

Definition: A unique identification assigned to each body structure used to determine age.

Recording Procedure: Record the sample #.

Age

Definition: Determined using the aging structure collected.

Recording Procedure: This is a post-survey exercise. Record after age data is compiled. The age of the fish will be verified, using the aging structure as part of the Quality Assurance.

Voucher

Definition: A unique identifying number assigned to each voucher specimen.

Method: Assign the number.

Recording Procedure: Record the voucher number for the specimen.

Genetic Structure

Definition: Body structures required for genetic classification of species. Not mandatory, except when specified on a project by project basis.

Method: Follow directions specified by the MoE Regional Information Specialist.

Recording Procedure: Record the structures collected.

Code	Description	Code	Description
TP	Tissue plug	FR	Fin ray

Genetic sample

Definition: A unique identifying number for each genetic sample.

Method: Assign a sample number.

Recording Procedure: Record the sample number for the genetic sample.

Comments

Definition: Comments regarding individual fish data from the fish sampling event.

Method: Make note of comments during the fish sampling event.

Recording Procedure: Record comment number in the light red comment indicator box(es) and write a correspondingly numbered comment in the provided space.

PHOTOGRAPHING FISH

1. Take photographs of representative fish within a watershed, fish found out of their expected range, diseased or parasitized fish and fish species that the crew is unable to positively identify.
2. Collect a voucher sample of any fish that cannot be identified or others specified in the contract. For each photograph, include an object of scale, such as a ruler, to indicate the relative size of the fish.
3. Record the object used in the *Comments* field of the fish card.

Photo

Definition: Photograph of a representative fish of each species found within the watershed and any diseased or parasitized fish.

Recording Procedure: Record the number of the roll on which the photo was taken (R) and the frame number of the photo (F) for film cameras. Use the comments field to track your photos if using a digital camera.

APPENDIX 1: GENERAL CODES

UTM coordinates

(For field UTM, feature UTM and fish sampling site UTM)

Code	Method Type
MAP	Map interpretation
GIS	Geographical Information System
AP	Aerial photo interpretation
GP1	Geodetic survey grade
GP2	Survey grade GPS
GP3	Recreational grade GPS
GPU	Uncorrected GPS
O	Other (specify type in comments)

MEASUREMENT METHODS

(For site length, channel width, wetted width, res. pool depth, bankfull depth, D95, d, flood signs, features)

Code	Definition	Code	Definition
GE	Ground estimates	RFL	Laser range finder
MS	Metre stick	RFV	Standard range finder
AL	Abney type level	HC	Hip-chain
AE	Aerial estimate	SC	Surveyor's chain
T	Metre tape	MAP	Map interpretation
RF	Range finder	O	Other

APPENDIX 2: FISH SPECIES CODES FOR BC

Standardized two and three character codes for fish species have been established and used in British Columbia for several years. The abbreviations currently in use are presented below. Consistent use of these codes is necessary to eliminate confusion and errors often associated with trying to decipher personal abbreviations for fish species. This list of species includes those found in British Columbia or known to have been introduced at some period.

GENERAL CODES	DESCRIPTION
NFC	No fish caught
NS	Not sampled

The following codes have been added to the Fish Species Code list to cover a) specific situations where identification to the species level is not possible, and b) fish that have been identified and verified as hybrids.

CODE	DESCRIPTION
DV/BT	Fish are either DV or BT, but suspect they are DV
BT/DV	Fish are either DV or BT, but suspect they are BT
RB/CT	Fish are either RB or CT, but suspect they are RB
CT/RB	Fish are either RB or CT, but suspect they are CT
TR	Fish are unidentifiable trout – only to be used for fry (<70 mm in length)
DVxBT	Verified DV BT crosses. For other verified hybrids, contact the Ministry for appropriate codes

CODE	COMMON NAMES	LATIN NAMES
Salmonids (Salmon, Trout, Char)		
AGB	Anadromous Brown Trout, Anadromous German Brown Trout	<i>Salmo trutta</i>
ACT	Anadromous Cutthroat Trout	<i>Oncorhynchus clarki</i> <i>Salmo clarki</i>)
ABT	Anadromous Bull Trout	<i>Salvelinus confluentus</i>
ADV	Anadromous Dolly Varden, Anadromous Dolly Varden Char	<i>Salvelinus malma</i>
AEB	Anadromous Eastern Brook Trout	<i>Salvelinus fontinalis</i>
AC	Arctic Char	<i>Salvelinus alpinus</i>
AS	Atlantic Salmon	<i>Salmo salar</i>
EB	Brook Trout, Eastern Brook Trout	<i>Salvelinus fontinalis</i>
GB	Brown Trout, German Brown Trout	<i>Salmo trutta</i>
BT	Bull Trout	<i>Salvelinus confluentus</i>
CH	Chinook Salmon, Spring Salmon, King Salmon, Tyee	<i>Oncorhynchus tshawytscha</i>
CM	Chum Salmon, Dog Salmon	<i>Oncorhynchus keta</i>
CCT	Coastal Cutthroat Trout	<i>Oncorhynchus clarki clarki</i> (formerly <i>Salmo clarki clarki</i>)
CO	Coho Salmon	<i>Oncorhynchus kisutch</i>
CT	Cutthroat Trout (General)	<i>Oncorhynchus clarki</i> (formerly <i>Salmo clarki</i>)
DV	Dolly Varden, Dolly Varden Char	<i>Salvelinus malma</i>
KO	Kokanee	<i>Oncorhynchus nerka</i>
LT	Lake Trout, Lake Char	<i>Salvelinus namaycush</i>
PK	Pink Salmon, Humpback Salmon	<i>Oncorhynchus gorbuscha</i>
RB	Rainbow Trout, Kamloops Trout	<i>Oncorhynchus mykiss</i> (formerly <i>Salmo gairdneri</i>)

CODE	COMMON NAMES	LATIN NAMES
SK	Sockeye Salmon	<i>Oncorhynchus nerka</i>
SPK	Splake	<i>Salvelinus fontinalis</i> x <i>S. namaycush</i>
ST	Steelhead	<i>Oncorhynchus mykiss</i> (formerly <i>Salmo gairdneri</i>)
SST	Steelhead (Summer-run)	<i>Oncorhynchus mykiss</i> (formerly <i>Salmo gairdneri</i>)
GT	Golden Trout	<i>Oncorhynchus mykiss</i> <i>aguabonita</i>
WST	Steelhead (Winter-run)	<i>Oncorhynchus mykiss</i> (formerly <i>Salmo gairdneri</i>)
WCT	Westslope Cutthroat Trout (preferred) Yellowstone Cutthroat Trout	<i>Oncorhynchus clarki lewisi</i> (formerly <i>Salmo clarki lewisi</i>)
Sturgeon		
GSG	Green Sturgeon	<i>Acipenser medirostris</i>
WSG	White Sturgeon	<i>Acipenser transmontanus</i>
WSG	White Sturgeon (Kootney River Pop)	<i>Acipenser transmontanus</i> Pop 1
Cod		
BB	Burbot, Freshwater Ling Cod, Ling, Loche, Lawyer	<i>Lota lota</i>
Whitefish		
BW	Broad Whitefish, Round- nosed Whitefish, Sheep- nose Whitefish	<i>Coregonus nasus</i>
DLW	Dragon Lake Whitefish	<i>Coregonus</i> Sp 1
GPW	Giant Pygmy Whitefish	<i>Prosopium</i> sp., poss. subspecies of <i>Prosopium</i> <i>coulteri</i>
HW	Humpbacked Whitefish	<i>Coregonus pidschian</i>
LW	Lake Whitefish, Common Whitefish, Humpback Whitefish	<i>Coregonus clupeaformis</i>
MW	Mountain Whitefish, Rocky Mountain Whitefish	<i>Prosopium williamsoni</i>

CODE	COMMON NAMES	LATIN NAMES
PW	Pygmy Whitefish, Coulter's Whitefish	<i>Prosopium coulteri</i>
RW	Round Whitefish	<i>Prosopium cylindraceum</i>
SQ	Squanga	<i>Coregonus</i> sp.
CA	Arctic Cisco	<i>Coregonus autumnalis</i>
CB	Bering Cisco	<i>Coregonus laurettae</i>
CL	Lake Cisco	<i>Coregonus artedii</i>
CS	Least Cisco	<i>Coregonus sardinella</i>
IN	Inconnu, Sheefish, "Conny"	<i>Stenodus leucichthys</i>
Lampreys		
AL	Arctic Lamprey	<i>Lampetra japonica</i>
PL	Pacific Lamprey, Sea Lamprey	<i>Lampetra tridentata</i>
BL	Western Brook Lamprey	<i>Lampetra richardsoni</i>
RL	River Lamprey, Western Lamprey	<i>Lampetra ayresi</i>
MCL	Morrison Creek Lamprey	<i>Lampetra richardsoni marifaga</i>
LL	Lake Lamprey, Cowichan Lamprey	<i>Lampetra macrostoma</i>
Grayling		
GR	Arctic Grayling	<i>Thymallus arcticus</i>
Goldeyes		
GE	Goldeye	<i>Hiodon alosoides</i>
Herrings		
SH	American Shad	<i>Alosa sapidissima</i>
Minnnows		
CP	Carp	<i>Cyprinus carpio</i>
GC	Goldfish	<i>Carassius auratus</i>
TC	Tench	<i>Tinca tinca</i>
ESC	Emerald Shiner	<i>Notropis atherinoides</i>
RSC	Redside Shiner	<i>Richardsonius balteatus</i>

CODE	COMMON NAMES	LATIN NAMES
STC	Spottail Shiner	<i>Notropis hudsonius</i>
FHC	Flathead Chub	<i>Platygobio gracilis</i>
LKC	Lake Chub	<i>Couesius plumbeus</i>
PCC	Peamouth Chub, Peamouth	<i>Mylocheilus caurinus</i>
NSC	Northern Pikeminnow	<i>Ptycheilus oregonensis</i>
CMC	Chiselmouth	<i>Acrocheilus alutaceus</i>
BMC	Brassy Minnow	<i>Hybognathus hankinsoni</i>
FM	Fathead Minnow	<i>Pimephales promelas</i>
FDC	Finescale Dace	<i>Phoxinus neogaeus</i> (formerly <i>Pfrille neogaea</i> & <i>Chrosomus neogaeus</i>)
LDC	Leopard Dace	<i>Rhinichthys falcatus</i>
LNC	Longnose Dace	<i>Rhinichthys cataractae</i>
NDC	Nooksack Dace, Nooky Dace	<i>Rhinichthys</i> sp.
RDC	Northern Redbelly Dace	<i>Phoxinus eos</i> (formerly <i>Chrosomus eos</i>)
XDC	Northern Redbelly Dace X Finescale Dace	<i>Phoxinus eos</i> (Cope) X <i>Phoxinus neogaeus</i>
PDC	Pearl Dace, Northern Pearl Dace	<i>Margariscus margarita</i> (formerly <i>Semotilus margarita</i>)
SDC	Speckled Dace	<i>Rhinichthys osculus</i>
UDC	Umatilla Dace	<i>Rhinichthys umatilla</i>

Suckers

BSU	Bridgelip Sucker, Columbia Small-scaled Sucker	<i>Catostomus columbianus</i>
CSU	Largescale Sucker, Coarsescale Sucker	<i>Catostomus macrocheilus</i>
LSU	Longnose Sucker, Fine- scaled Sucker, Northern Sucker	<i>Catostomus catostomus</i>
MSU	Mountain Sucker, Northern/Plains Mountain Sucker	<i>Catostomus platyrhincus</i> (formerly <i>Pantosteus jordani</i>)
SSU	Salish Sucker	<i>Catostomus</i> sp.

CODE	COMMON NAMES	LATIN NAMES
WSU	White Sucker	<i>Catostomus commersoni</i>
Catfish		
BKH	Black Bullhead, Black Catfish	<i>Ameiurus melas</i> (formerly <i>Ictalurus melas</i>)
BNH	Brown Bullhead, Brown Catfish	<i>Ameiurus nebulosus</i> (formerly <i>Ictalurus nebulosus</i>)
Pike		
NP	Northern Pike, Jackfish, Jack	<i>Esox lucius</i>
Smelts		
ASM	Arctic Smelt	?
EU	Eulachon, Candlefish	<i>Thaleichthys pacificus</i>
LSM	Longfin Smelt	<i>Spirinchus thaleichthys</i>
PLS	Pygmy Longfin Smelt	<i>Spirinchus</i> spp.
RSM	Rainbow Smelt	<i>Osmerus dentex</i>
SSM	Surf Smelt	<i>Hypomesus pretiosus</i>
Sticklebacks		
SB1	Balkwill Lake Benthic Stickleback	<i>Gasterosteus</i> sp.
SB2	Balkwill Lake Limnetic Stickleback	<i>Gasterosteus</i> sp.
BSB	Brook Stickleback	<i>Culea inconstans</i>
SB3	Charlotte Unarmoured Stickleback, Unarmoured Stickleback	<i>Gasterosteus</i> sp.
SB4	Emily Lake Benthic Stickleback	<i>Gasterosteus</i> sp.
SB5	Emily Lake Limnetic Stickleback	<i>Gasterosteus</i> sp.
SB6	Enos Lake Benthic Stickleback	<i>Gasterosteus</i> sp.
SB7	Enos Lake Limnetic Stickleback	<i>Gasterosteus</i> sp.
SB8	Giant Stickleback, Giant Black	<i>Gasterosteus</i> sp.

CODE	COMMON NAMES	LATIN NAMES
SB9	Hadley Lake Benthic Stickleback	<i>Gasterosteus</i> sp.
SB10	Hadley Lake Limnetic Stickleback	<i>Gasterosteus</i> sp.
SB11	Lake Stickleback	<i>Gasterosteus</i> sp.
NSB	Ninespine Stickleback	<i>Pungitius pungitius</i>
SB12	Paxton Lake Benthic Stickleback	<i>Gasterosteus</i> sp.
SB13	Paxton Lake Limnetic Stickleback	<i>Gasterosteus</i> sp.
SBB	Priest Lake Benthic Stickleback	<i>Gasterosteus</i> sp.
SBP	Priest Lake Limnetic Stickleback	<i>Gasterosteus</i> sp.
TSB	Threespine Stickleback	<i>Gasterosteus aculeatus</i>
Sculpins		
CAL	Coastrange Sculpin, Aleutian Sculpin	<i>Cottus aleuticus</i>
CCL	Cultus Lake Sculpin	<i>Cottus</i> sp.
CMT	Deepwater Sculpin	<i>Myoxocephalus thompsoni</i> (<i>quadricornis</i> ?)
CBA	Mottled Sculpin	<i>Cottus bairdi</i>
CLA	Pacific Staghorn Sculpin, Staghorn Sculpin	<i>Leptocottus armatus</i>
CAS	Prickly Sculpin	<i>Cottus asper</i>
CCA	Sharpnose Sculpin	<i>Clinocottus acuticeps</i>
CCN	Shorthead Sculpin	<i>Cottus confusus</i>
CCG	Slimy Sculpin	<i>Cottus cognatus</i>
CRI	Spoonhead Sculpin, Spoonhead Muddler	<i>Cottus ricei</i>
COM	Tidepool Sculpin	<i>Oligocottus maculosus</i>
CRH	Torrent Sculpin	<i>Cottus rhotheus</i>
Sunfish/Bass		
PMB	Pumpkinseed, Sunfish, Pumpkinseed Sunfish	<i>Lepomis gibbosus</i>
BCB	Black Crappie, Calico Bass	<i>Pomoxis nigromaculatus</i>
LMB	Largemouth Bass,	<i>Micropterus salmoides</i>

CODE	COMMON NAMES	LATIN NAMES
SMB	Largemouth Black Bass	
	Smallmouth Bass, Smallmouth Black Bass	<i>Micropterus dolomieu</i>
Perches		
WP	Walleye, Pike-perch, Pickerel, Dore, many others	<i>Stizostedion vitreum</i>
YP	Yellow Perch, American Yellow Perch, many others	<i>Perca flavescens</i>
Flounders		
SFL	Starry Flounder	<i>Platichthys stellatus</i>
Troutperch		
TP	Troutperch	<i>Percopsis omiscomaycus</i>
Mosquitofish		
GAM	Mosquitofish, Gambusia	<i>Gambusia</i> sp.