

Identifying Canadian Freshwater Fishes through DNA Barcodes

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Abstract

Background: DNA barcoding aims to provide an efficient method for species-level identifications using an array of species specific molecular tags derived from the 5' region of the mitochondrial cytochrome c oxidase I (COI) gene. The efficiency of the method hinges on the degree of sequence divergence among species and species-level identifications are relatively straightforward when the average genetic distance among individuals within a species does not exceed the average genetic distance between sister species. Fishes constitute a highly diverse group of vertebrates that exhibit deep phenotypic changes during development. In this context, the identification of fish species is challenging and DNA barcoding provide new perspectives in ecology and systematics of fishes. Here we examined the degree to which DNA barcoding discriminate freshwater fish species from the well-known Canadian fauna, which currently encompasses nearly 200 species, some which are of high economic value like salmons and sturgeons.

Methodology/Principal Findings: We bi-directionally sequenced the standard 652 bp "barcode" region of COI for 1360 individuals belonging to 190 of the 203 Canadian freshwater fish species (95%). Most species were represented by multiple individuals (7.6 on average), the majority of which were retained as voucher specimens. The average genetic distance was 27 fold higher between species than within species, as K2P distance estimates averaged 8.3% among congeners and only 0.3% among concepcifics. However, shared polymorphism between sister-species was detected in 15 species (8% of the cases). The distribution of K2P distance between individuals and species overlapped and identifications were only possible to species group using DNA barcodes in these cases. Conversely, deep hidden genetic divergence was revealed within two species, suggesting the presence of cryptic species.

Conclusions/Significance: The present study evidenced that freshwater fish species can be efficiently identified through the use of DNA barcoding, especially the species complex of small-sized species, and that the present COI library can be used for subsequent applications in ecology and systematics.

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Introduction

DNA barcoding is designed to provide accurate, and automated species identifications through the use of molecular species tags based on short, standardised gene regions [1,2]. While humanity is facing increasing evidence of the erosion of Earth's biodiversity, this approach is proving its effectiveness in characterising the complexity of the biodiversity realm at a pace unequalled by other characters [3]. The primary goals of DNA barcoding focus on the assembly of reference libraries of barcode sequences for known species in order to develop reliable, molecular tools for species identification in nature. Current results suggest that, in a large

array of organisms, species are generally well delineated by a particular sequence or by a tight cluster of very similar sequences that allow unambiguous identifications [4,5,6,7,8,9,2,10,11,12].

Despite the great promise of DNA barcoding, it has been controversial in some scientific circles [13,14]. Yet, recent results illustrated some straightforward benefits from the use of a standardised molecular approach for identification [1,2]. First, intraspecific phenotypic variation often overlaps that of sister taxa in nature, which can lead to incorrect identifications if based on phenotype only [e.g. 15]. Second, DNA barcodes are effective whatever the life stages under scrutiny [e.g. 16, 17]. Third, cryptic variation and often spectacular levels of undetected taxonomic

diversity have been frequently reported [e.g. 18, 19, 20]. Finally, DNA barcode libraries are fully available as they are deposited in a major sequence database, and attached to a voucher specimen whose origin and current location are recorded [2,3]. Once libraries are available, recent studies illustrate the vast array of applications that can be applied to them such as forensic engineering [21,22], ecology of cryptic communities [23], the tracking of invasive species [24,25] and identification of prey from predator stomach samples [e.g. 26].

With the aim of assigning specimens to known species based on molecular tags, a 648-bp segment of the 5' region of mitochondrial cytochrome c oxidase I (COI) gene forms the library of primary barcodes for the animal kingdom [1]. Mitochondrial DNA (mtDNA) presents several advantages that make it well suited for large scale molecular tagging. First, this genome is present in a large number of copies yielding substantial amounts of genomic DNA from a variety of extraction methods. Second, the high mutation rate and small effective population size make it often an informative genome about evolutionary patterns and processes [27,28]. For a barcoding approach to species identification to succeed, however, within-species DNA sequences need to be more similar to one another than to sequences in different species. Several processes such as pseudogenes ontogenesis, introgressive hybridisation, and retention of ancestral polymorphism pose potential difficulties in capturing species boundaries using mtDNA sequences [29,30,31,32]. The detection of mixed genealogy between closely related species has been previously estimated to occur in nearly 20 percent of the cases in the wild [30]. Recent barcoding studies emphasised that this percent can vary widely among phyla, yet species assignment failures typically do not exceed 5 to 10 percent in a large array of organisms [2].

The economic importance and identification challenges associated with fishes prompted the launch of an international Fish Barcoding of Life (FISH-BOL) initiative (http://www.fishbol.org/) with the aim of barcoding all fishes. In the context of FISH-BOL and for the first time, we examine whether barcoding captures species boundaries and allows species identification among some of the major orders of primary freshwater fishes. Although COI divergence and species identification success has been previously assessed for some marine fishes [7], the average divergence found among freshwater fish species is unknown. The Canadian freshwater fish fauna has been subject to intensive taxonomic analysis for decades [33,34,35,36,37]. Thus, this fauna provides an excellent opportunity to test the efficacy of barcoded-based species delimitation and identification of freshwater fishes over a broad geographic range. Moreover, a large number of species from highly endangered and economically important groups such as salmon and sturgeon are found in Canada. Given their high diversity and dramatic phenotypic changes during development, fish species identification is no easy task. Hence, the development of reliable and universal molecular tags constitutes a major requirement for forensic engineering and conservation strategies involving such emblematic species.

Materials and Methods

BARCODE data standard and data management on BOLD

DNA Barcoding has greatly influenced the pace of sequence data acquisition. This approach prompted the development of new protocols and databases to manage the constitution of COI libraries for molecular identification. The Barcode of Life Data System (BOLD; see http://www.barcodinglife.org) was developed as a collaborative online workbench that has evolved into a resource for the DNA barcoding community [3]. The BOLD database currently host specimens records for which essentially, seven data elements are listed:

- 1. Species name
- 2. Voucher data
- 3. Collection record
- 4. Identifier of the specimen
- 5. COI sequence of at least 500 bp
- 6. PCR primers used to generate the amplicon

The core data element in BOLD is a biphasic record consisting of both a "specimen page" and a "sequence page" (Figure 1). Access to these pages is possible through direct link in the project console (1 in Figure 1) that includes a comprehensive list of all specimens included in the project. The specimen page (2 in Figure 1) assembles varied data about source of each specimen including the specimen's donor and identifier, taxonomy, collection data (including geospatial coordinates and digital images), the repository and catalog number of the voucher specimen. Each specimen page is coupled to a sequence page (3 in Figure 1) that records the barcode sequence (FASTA format), PCR primers and trace files, amino acid translation, and ultimately the GenBank accession number as well. Information from both the specimen and sequence pages can be incorporated into taxon ID trees that can be used in the identification system, while onboard mapping functions support investigations into spatial molecular ecology.

After preparing the barcode records in BOLD, data were uploaded into GenBank. Appendix S1 provides the voucher specimen ID, BOLD specimen record number, and GenBank accession number for each record. The Consortium for the Barcode of Life, in cooperation with GenBank and the other members of the International Nucleotide Sequence Database Collaboration (INSDC), have created and implemented the BARCODE data standard. "BARCODE" is a reserved keyword for those records in an INSDC database that meet a higher quality standard that makes them more reliable links between a gene sequence and a species name. All of the GenBank records created by this project and listed in Appendix S1 carry the BARCODE keyword because they include the following data:

- 1. Bi-directional sequences of at least 500 base-pairs from the approved barcode region of COI, containing no ambiguous sites
- 2. Links to electropherogram trace files available in the NCBI Trace Archive
- 3. Sequences for the forward and reverse PCR amplification primers
- 4. Species names that refer to documented names in a taxonomic publication or other documentation of the species concept used
- 5. Links to voucher specimens using the approved format of institutional acronym:collection code:catalog ID number

Taken together, the data required under the BARCODE data standard give researchers and other users with unprecedented access to data and metadata associated with the DNA sequence in GenBank. In addition, all of the information related to the present project is publicly available in the 'Freshwater Fish of Canada' projects (BCF and BCFB) on the Barcode of Life database (see http://www.barcodinglife.org) [3].

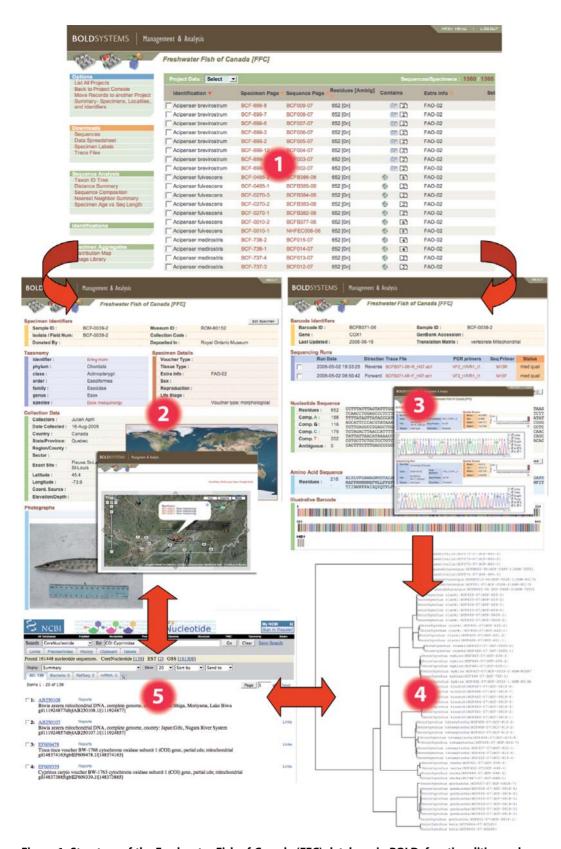


Figure 1. Structure of the Freshwater Fish of Canada (FFC) database in BOLD, functionalities and connections with others public databases. 1, Project page with the list of the specimens analysed including a link to the specimen and sequence page; 2, Specimen page for an individual of *Esox masquinongy* including voucher information, taxonomy, collection location, collection site maps and specimen image; 3, Sequence page for the same individual of *Esox masquinongy* including specimens details, sequencing details including links to trace files, amino acid translation of sequence and trace viewer; 4, Taxon ID tree for the Canadian members of the Salmonid genus *Oncorhynchus*; 5, Connections with the GenBank. doi:10.1371/journal.pone.0002490.g001

Data acquisition and analytical tools

DNA sources for this study included either frozen or ethanolfixed tissue samples (muscle, liver, blood, or fin). Samples for barcoding originated from expert-identified specimens based on morphological criteria (meristic, morphometric and colouration) currently recognized in recent monographs [33,34,35,36,37]. For each specimens, detailed geographic information and where possible, reference specimens were deposited as vouchers in publicly accessible collections. However, some tissues collected before the beginning of FISH-BOL were obtained through the support of fish taxonomists, particularly for species exhibiting remote geographic distribution. In that case, sequences were generated from tissues lacking proper morphological vouchers. In order to allow the repeatability of the sequences generated, the tissues used for extraction and amplifications were given the status of 'tissue' voucher and distinguished from traditional 'morphological' vouchers. Of the 1360 specimens analysed (190 species), 861 (127 species) sequences were obtained from specimens with vouchers housed in the collection of the Royal Ontario Museum, Toronto (Appendix S1). Hence, samples with specimens housed in museum collections represented 65% of the sequences and 70% of the species analysed in this study.

Previous comparative genetic surveys suggested that freshwater fishes generally exhibit higher levels of inter-population genetic diversity than marine fishes [38]. Hence, we aimed, where possible, to sample three to five individuals per site for at least two sites from different watersheds for widely distributed species to capture a representative part of the molecular diversity. Numbers of specimens per species ranged from one to 17 with a mean of 7.6; nearly twice the number of individuals per species previously analysed for marine fishes [7]. According to the General Status of Wildlife in Canada [39], the Canadian fauna currently includes 203 species of which 194 (96%) have been sampled during the present survey (Appendix S1).

DNA extractions were performed with the NucleoSpin96 (Machery-Nagel) kit according to the specification of the manufacturer under automation with a Biomek NX liquid-handling station (Beckman-Coulter) equipped with a filtration manifold as previously described [40,41]. A 652-bp segment was amplified from the 5' region of the mitochondrial COI gene using either the following primers FishF1-5'TCAACCAACCACAAAGACATTGGCAC3' [7] and FishR1-5'TAGACTTCTGGGTGGCCAAAGAATCA3' [7] or the primer cocktails (including M13 tails to facilitate sequencing) [42] when amplifications failed using the first set of primers. PCR amplifications were performed in 12.5 µl volume including 6.25 µl of 10% trehalose, 2 µl of ultra pure water, 1.25 µl of 10× PCR buffer (10mM Kcl, 10mM (NH₄)₂SO₄, 20mM Tris-HCl (pH8.8), 2mM Mg SO₄, 0.1% Triton X-100), 0.625 µl of MgCl₂ (50mM), 0.125 µl of each primer (0.01mM), 0.0625 µl of each dNTP (10mM), 0.0625 µl of Taq DNA polymerase (New England Biolabs), and 2 µl of template DNA. The PCR conditions consisted of 94°C for 2 min, 35 cycles of 94°C for 30 s, 52°C 40 s, and 72°C for 1 min, with a final extension at 72°C for 10 min.

All the sequences have been deposited in GenBank and accession numbers for the barcodes, specimen and collection data, sequences, trace files and primers details are available within the BCF and BCFB project files in BOLD (http://www.barcodinglife.org). Sequence divergence was calculated using the Kimura 2-parameter (K2P) model [43] and the mid-point rooted Neighbour-joining (NJ) tree of K2P distances was created to provide a graphic representation of the species divergence [44] as implemented in the 'Sequence Analysis' module of BOLD. We checked for a potential sampling bias in the distribution of genetic diversity by plotting the mean intraspecific genetic distance

between haplotypes against the number of individual analysed and tested the significance of the relationship using a covariance analysis as implemented in Statgraphics [45].

Results

A total of 194 species have been sampled during the present survey and the primers used amplified the target region of all, but four species: Ctenopharyngodon idella (n = 2), Lampetra richardsoni (n = 5), Lampetra camtschaticum (n = 5) and Catostomus columbianus (n = 5). Thus, a total of 1360 COI barcodes of 652-bp have been obtained for 190 species distributed among 85 genera and 28 families (Appendix S1; BCF abd BCFB projects in BOLD). No insertions/deletions or codon stops were found, supporting the view that all of the amplified sequences constitute functional mitochondrial COI sequences. Moreover, all the amplified sequences were larger than 600-bp, the limit typically observed for nuclear DNA sequences originating from mtDNA (NUMTs) [31]. The entire K2P/NJ tree derived from this study is available in Appendix S2 (or can be generated using BOLD).

Average intraspecific variation was unrelated to the number of individuals analysed (average intraspecific K2P distance = 0.015N+0.135; Covariance Analysis; F=2.22; P=0.138), suggesting representative sampling for the different species. The mean K2P distance of individual within species was 0.302 compared with 8.286 for species within genera (Table 1). Hence, overall, there was a 27-fold more pronounced difference among congeneric species than among conspecific individuals. Distributions of mean K2P distances among conspecific individuals and among congeneric species, however, partially overlapped as K2P distances ranged from 0 to 7.416 among conspecifics and 0 to 19.326 among congeneric species (Table 1).

A steady increase of genetic variation through increasing taxonomic levels was observed, supporting a marked change of genetic divergence at the species boundaries (Figure 2A). The analysis of the distribution of the nearest-neighbour distance (NND), namely the minimum genetic distance between a species and its closest congeneric relative revealed that only 20% of the NND was lower than 1% (Figure 2B) and only 7% of the NND (14 cases) were lower than 0.1% (Table 2). By contrast, the divergence between conspecific individuals was lower than 1% in 96% of cases. NND averaged 7.5%, which was 30-fold higher than the mean within species distance of around 0.3% and 13-fold higher than the mean maximum intraspecific distance of around 0.6%. Overlap in the distribution of the genetic distances between conspecifics individuals and congeneric species may originate from deep intraspecific divergences and low sister-species divergence.

Table 1. Summary of genetic divergences (K2P model used for computing distances) for increasing taxonomic levels. Data are from 1360 sequences from 190 species and 85 genera.

Comparisons within	Taxa	Number of comparisons	Min	Mean	Max	SE
Species	190	5865	0	0.27	7.42	0.01
Genus, among Species	85	18933	0	8.37	19.33	0.03
Family, among Genus	28	96992	2.67	15.38	23.22	0.01
Order, among Families	20	76571	14.25	20.06	29.44	0.01
Class, among Orders	2	681968	17.49	24.57	31.20	0.002

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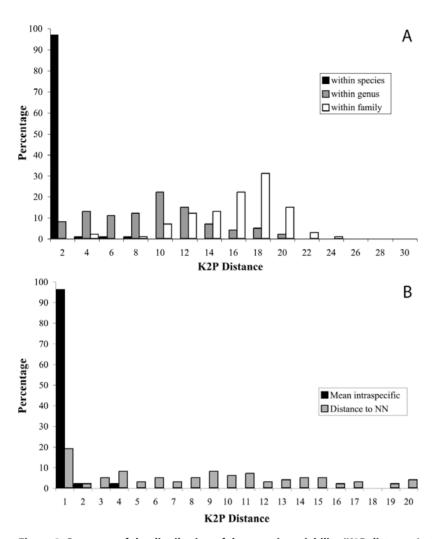


Figure 2. Summary of the distribution of the genetic variability (K2P distances) at COI sequences for the 1360 individuals and 190 species analysed. A. Distribution of the genetic distance within different taxonomic categories. B. Distribution of the genetic distances to the nearest-neighbour and mean intra-specific distance. doi:10.1371/journal.pone.0002490.g002

In a few cases, we detected deep divergences among individuals that had been assigned to single species. Two lineages, one in the Laurentian Great Lakes area and another one in the St Lawrence River and diverging from 1% to 2% from each other were observed in five species including the common shiner (Luxilus comutus), fathead minnow (Pimephales promelas), finescale dace (Phoxinus neogaeus), golden shiner (Notemigonus crysoleucas) and fantail darter, Etheostoma flabellare (Appendix S2). The same pattern was found among samples from the brook stickleback Culaea inconstans and the redfin pickerel, Esox americanus, where the divergence was even greater as it reached 7% and 3%, respectively. This result supports a genetic differentiation of the two Esox americanus subspecies E. americanus americanus from the St Lawrence River and E. americanus vermiculatus from the Laurentian Great Lakes area to the west. Although a single haplotype was found for each subspecies, more genetic divergence was observed between these two subspecies than with Esox niger since E. americanus was paraphyletic with its genealogy encompassing that of Esox niger. Likewise, a lineage found in the Pacific coast and diverging by 1.5% from the eastern samples was observed in the mottled sculpin, Cottus bairdii. Moreover, the Pacific lineage of C. bairdii was more closely related to the slimy sculpin, Cottus cognatus, than other conspecific samples. This suggests that a careful reappraisal of the current taxonomy for these groups could prove informative.

Cases of shared barcode haplotypes were detected in 13 (7%) of the species analysed including the following pairs: between the lampreys *Ichthyomyzon fossor* and *I. unicuspis*, between the shiners *Notropis volucellus* and *N. buchanani*, between the shad *Alosa aestivalis* and *A. pseudoharengus*, between the putative species in the cisco species flock, *Coregonus artedi*, *C. hoyi*, *C. kiyi*, *C. nigripinnis* and *C. zenithicus*; and, between the darters *Etheostoma nigrum* and *E. olmstedi*. Nevertheless, we only found evidence of introgressive hybridisation between two diverging species in the case of the darters *Etheostoma nigrum* and *E. olmstedi* with two clades diverging by nearly 6%, each one more closely associated with one of the two species. In all the other cases, COI sequences of the mixed species were tightly clustered and differed by less than 0.1% divergence (Table 2).

Discussion

This study has shown the efficacy of COI barcodes for diagnosing North American freshwater fishes since most species examined here corresponded to a single, cohesive array of barcode sequences that are distinct from those of any other species. The success of the barcoding approach depends on the distribution of genetic distances between conspecific individuals and heterospecific individuals given that failures in barcode clustering are

Table 2. Summary of the Canadian freshwater fish diversity and distribution of the genetic distance of each of the 190 species analysed to the nearest-neighbour at COI (K2P model used for computing distances).

		Number of species					
Order	Family	recorded	barcoded	<0.1	0.1-1.0	1.0-2.7	>2.7
Pleuronectiformes	Pleuronectidae	1	1	0	0	0	1
Cypriniformes	Cyprinidae	54	50	3	6	1	40
	Catostomidae	18	17	0	2	3	12
Scorpaeniformes	Cottidae	9	8	0	2	3	3
Salmoniformes	Salmonidae	29	29	7	6	3	13
Esociformes	Umbridae	2	2	0	0	0	2
	Esocidae	4	4	0	2	0	2
Clupeiformes	Clupeidae	4	4	0	2	0	2
Cyprinodontiformes	Fundulidae	3	3	0	0	0	3
Perciformes	Percidae	16	16	2	0	0	14
	Centrarchidae	13	12	0	0	3	9
	Percichthyidae	3	3	0	0	0	3
	Gobiidae	2	2	0	0	0	2
	Sciaenidae	1	1	0	0	0	1
Gasterosteiformes	Gasterosteidae	5	5	0	0	0	5
Siluriformes	Ictaluridae	10	10	0	0	2	8
Osmeriformes	Osmeridae	4	3	0	0	0	3
Semionotiformes	Lepisosteidae	2	2	0	0	0	2
Acipenseriformes	Acipenseridae	5	5	0	0	2	3
Osteoglossiformes	Hiodontidae	2	2	0	0	0	2
Petromyzontiformes	Petromyzontidae	10	5	2	0	0	3
Percopsiformes	Percopsidae	1	1	0	0	0	1
Gadiformes	Lotidae	1	1	0	0	0	1
	Gadidae	1	1	0	0	0	1
Atheriniformes	Atherinopsidae	1	1	0	0	0	1
Anguilliformes	Anguillidae	1	1	0	0	0	1
Amiiformes	Amiidae	1	1	0	0	0	1
	Total	203	190	14	20	17	139

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proportional to the overlap between both distributions [46]. It has been shown that lineages diversify more quickly within species than between species [47]. This is due to the fact that diversification within species is driven by mutation at a rate higher than speciation within lineages. Hence, the branch length between species tends to be much deeper than between conspecific individuals leading to a gap in the distribution of the pairwise distance between conspecific individuals and between species that has been referred to the barcoding gap [46]. The COI locus harbours a high mutational rate even for mtDNA [48]. The present study confirms that, in the vast majority of the taxa examined here (93%), the barcoding gap was observed and the mean genetic distance between conspecifics was generally much smaller than the average distance between individual from distinct species, even if only the sister species were considered.

Although barcode analyses primarily seek to delineate species boundaries at the COI locus for the assignment of unknown individuals to known species, unsuspected diversity and overlooked species are often detected through barcodes analyses, sometimes spectacularly [10,18,47]. The average distance between conspecific individuals was around 0.3% while average NND and

average distance between congeneric species were 7.5% and 8.3%, respectively. When screening for species splits using a threshold of 1% (3 fold higher than the average intraspecific variability), nine species exhibited lineages falling out of the average divergence between conspecific individuals.

Among the set of 190 species, however, 13 species (7%) exhibited barcode sequences that were shared or overlapped with those of other species. Regarding these cases, at least three factors may be involved [30,46]. First, the establishment of reciprocal monophyly between two sister species is a function of time given that fixation of a new coalescent follow the line of descent framework from the coalescent theory [49,50]. Second, the taxa may share polymorphism due to introgressive hybridisation. If hybridisation is due to secondary contact after a stage of isolation and genetic drift, introgressive hybridisation may be detected due to the presence of two divergent clusters, each one being found predominantly in one species or the other. Finally, the barcoding approach first examines species delineation through COI barcodes for species established generally through a traditional approach of taxonomy using phenotypes. Some of the pairs with overlapping barcodes, however, may be a single species. Alternatively, the use

of uniform threshold may be a source of error leading to erroneous assignment of individuals to species [51,52]. In the present case, 34 species would have been undetected by using a 1% threshold. Providing that seven species share polymorphism or harbour mixed genealogy, 24 species with monophyletic COI lineages would have been overlooked with a 1% threshold. Yet, the development of assignment tools based on more realist probabilistic models under a coalescent framework will likely solve this problem and enhanced the statistical power of individual assignment through the use of a single gene [53,54].

The present study is the first to assess the resolution of barcoding for freshwater fish species from a variety of primary freshwater groups. It is widely appreciated that the fragmentation of the rivers and lakes from continental freshwater network leads to more pronounced genetic structure among populations and deeper divergence among haplotypes than in the marine realm [38]. In the largest barcoding study conducted so far on marine fishes to date [7], the average observed distance between conspecifics was 0.4% while the average divergence reached 9.9% between congeneric species. However, the average distance between conspecifics and congeneric species reached 0.3% and 8.3%, respectively, for freshwater fishes in this study, a pattern strikingly similar to that of marine fishes. Although geographic structure was often detected here among populations, the present survey suggests that the higher geographic structure of freshwater fishes is not necessarily reflected in deeper intraspecific and interspecific divergence than marine species. Although, we failed to capture a substantial amount of population diversity through the present sampling, it remains unlikely that sampling artefacts alone can account for similar intraspecific divergences found among freshwater and marine species. Admittedly however, the Canadian freshwater fish fauna may not be representative of old established population diversity since most of the rivers and lakes of the country have been colonised after the glacial retreat at the end of the Pleistocene [55].

In summary, most of the North American freshwater fish species analysed here exhibit a similar pattern of genetic diversity at COI, each being a single cluster of tightly related mtDNA sequences distinct from all other species. Therefore, the present survey supports the view that the use of COI barcodes is a powerful tool for species identification. Using this method would clearly allow the identification of individually isolated freshwater fish eggs, larvae, fillets and fins, hence providing many news tools useful for the practice of conservation and forensics genetic in these freshwater fishes. From a systematic perspective, COI barcodes provide a new and fast approach for screening the real number of species characterised by private sets of diagnostic characters. The identification of several cases of polyphyletic or paraphyletic COI species genealogy further supports the view that an iterative process of DNA barcoding followed by taxonomic analyses using other characters will be a productive way to catalogue biodiversity [10,56]. The present data set coupled with the functionality in BOLD provides a tool that is already operational for molecular assisted identification of the Canadian species. The entire cataloguing of the North American freshwater fish fauna, which is currently being undertaken by FISH- BOL, will result in a significant improvement of our knowledge concerning the systematic of the freshwater fishes of the region and also facilitate monitoring changes in the geographic distribution of species that will probably occur in the future.

Supporting Information

Appendix S1 Details of species and specimens. Barcode of Life Database (BOLD) specimen numbers given, along with GenBank accession numbers, geographic locality and voucher details.

Found at: doi:10.1371/journal.pone.0002490.s001 (1.28 MB DOC)

Appendix S2 Neighbour-joining tree of 1360 COI sequences from the 190 freshwater fish species sampled as obtained in BOLD, using K2P distances.

Found at: doi:10.1371/journal.pone.0002490.s002 (0.95 MB DOC)

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Author Contributions

Conceived and designed the experiments: LB RH NH. Performed the experiments: LB NH JA. Analyzed the data: ET LB RH NH EH NM DW JA. Contributed reagents/materials/analysis tools: ET LB PB NH EH NM MB DW AC JZ JA PD. Wrote the paper: ET LB RH NH NM.

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				BOLD	GenBank
Species name	Geographic locality	Voucher type		Specimen number	
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue		BCF-0699-8	EU523870
A cipenser brevirostrum	Canada: New Brunswick: Aquaculture Canada: New Brunswick: Aquaculture	tissue		BCF-0699-7	EU523871 EU523872
Acipenser brevirostrum	-	tissue		BCF-0699-6	
Acipenser brevirostrum Acipenser brevirostrum	Canada: New Brunswick: Aquaculture Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-3 UOG:Bio:BCF-0699-2	BCF-0699-3	EU523873 EU523874
•	1	tissue			
Acipenser brevirostrum Acipenser brevirostrum	Canada: New Brunswick: Aquaculture Canada: New Brunswick: Aquaculture	tissue tissue	UOG:Bio:BCF-0699-12 UOG:Bio:BCF-0699-11		EU523875 EU523876
Acipenser brevirostrum			UOG:Bio:BCF-0699-10		EU523877
Acipenser fulvescens	Canada: New Brunswick: Aquaculture Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue tissue	UOG:Bio:BCF-010-1	BCF-0099-10 BCF-010-1	EU523877 EU523878
Acipenser fulvescens	Canada: Ontario: Georgian Bay		ROM:Ich:BCF-0495-2	BCF-010-1 BCF-0495-2	EU524392
Acipenser fulvescens	Canada: Ontario: Georgian Bay		ROM:Ich:BCF-0495-1	BCF-0495-1	EU524392 EU524393
Acipenser fulvescens	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue		BCF-0270-3	EU524394
Acipenser fulvescens	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0270-2		EU524395
Acipenser fulvescens	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0270-1	BCF-0270-1	EU524396
Acipenser fulvescens	Canada: Quebec: Fleuve St-Laurent, Invice St-Nicolas Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue	UOG:Bio:BCF-010-2	BCF-010-2	EU524397
Acipenser medirostris	United States: Washington: Rogue river	tissue	UOG:Bio:BCF-0738-3	BCF-0738-3	EU523879
Acipenser medirostris	United States: Washington: Rogue river	tissue		BCF-0738-2	EU523880
Acipenser medirostris	United States: Washington: Rogue river	tissue	UOG:Bio:BCF-0738-1	BCF-0738-1	EU523881
Acipenser medirostris	United States: Washington: Sacramento river	tissue		BCF-0737-4	EU523882
Acipenser medirostris	United States: Washington: Sacramento river	tissue		BCF-0737-3	EU523883
Acipenser medirostris	United States: Washington: Sacramento river	tissue	UOG:Bio:BCF-0737-2	BCF-0737-2	EU523884
Acipenser medirostris	United States: Washington: Sacramento river	tissue	UOG:Bio:BCF-0737-1	BCF-0737-1	EU523885
Acipenser oxyrynchus	Canada: Quebec: Fleuve Saint-Laurent, Ile Madamme		ROM:Ich:BCF-009-1	BCF-009-1	EU523886
Acipenser oxyrynchus	Canada: Quebec: Fleuve St-Laurent, Ile Madame		ROM:Ich:BCF-009-5	BCF-009-5	EU524398
Acipenser oxyrynchus	Canada: Quebec: Fleuve St-Laurent, Ile Madamme		ROM:Ich:BCF-009-4	BCF-009-4	EU524399
Acipenser oxyrynchus	Canada: Quebec: Fleuve St-Laurent, Ile Madamme		ROM:Ich:BCF-009-3	BCF-009-3	EU524400
Acipenser oxyrynchus	Canada: Quebec: Fleuve St-Laurent, Ile Madamme		ROM:Ich:BCF-009-2	BCF-009-2	EU524401
Acipenser transmontanus	United States: Washington: Nechako reservoir	tissue	UOG:Bio:BCF-0735-3	BCF-0735-3	EU523887
Acipenser transmontanus	United States: Washington: Nechako reservoir	tissue		BCF-0735-2	EU523888
Acipenser transmontanus	United States: Washington: Nechako reservoir	tissue		BCF-0735-1	EU523889
Acipenser transmontanus	United States: Washington: Fraser river	tissue	UOG:Bio:BCF-0734-3	BCF-0734-3	EU523890
Acipenser transmontanus	United States: Washington: Fraser river	tissue	UOG:Bio:BCF-0734-1	BCF-0734-1	EU523891
Amia calva	Canada: Quebec: Riviere Richelieu, Saint-Ours	tissue	UOG:Bio:BCF-0014-1	BCF-0014-1	EU523910
Amia calva	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	tissue	UOG:Bio:BCF-0015-1	BCF-0015-1	EU524434
Amia calva	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0014-2	BCF-0014-2	EU524435
Anguilla rostrata	Canada: Quebec: Riviere Laval	morphological	ROM:Ich:BCF-0016-1	BCF-0016-1	EU523918
Anguilla rostrata	Canada: New Brunswick: Mc Quarrie Brook	morphological	ROM:Ich:BCF-0582-5	BCF-0582-5	EU524436
Anguilla rostrata	Canada: New Brunswick: Mc Quarrie Brook		ROM:Ich:BCF-0582-4	BCF-0582-4	EU524437
Anguilla rostrata	Canada: New Brunswick: Mc Quarrie Brook	morphological	ROM:Ich:BCF-0582-2	BCF-0582-2	EU524438
Anguilla rostrata	Canada: New Brunswick: Mc Quarrie Brook	morphological	ROM:Ich:BCF-0582-1	BCF-0582-1	EU524439
Anguilla rostrata	Canada: Ontario: Lake Simcoe	morphological	ROM:Ich:BCF-0538-1	BCF-0538-1	EU524440
Anguilla rostrata	Canada: Ontario: Lake Joseph	morphological	ROM:Ich:BCF-0425-1	BCF-0425-1	EU524441
Anguilla rostrata	Canada: Ontario: Lake Simcoe	morphological	ROM:Ich:BCF-0402-1	BCF-0402-1	EU524442
Labidesthes sicculus	Canada: Quebec: Riviere Richelieu	morphological	ROM:Ich:BCF-0130-1	BCF-0130-1	EU524108
Labidesthes sicculus	Canada: Ontario: Fleuve St-Laurent	morphological	ROM:Ich:BCF-0350-3	BCF-0350-3	EU524689
Labidesthes sicculus	Canada: Ontario: Fleuve St-Laurent	morphological	ROM:Ich:BCF-0350-2	BCF-0350-2	EU524690
Labidesthes sicculus	Canada: Ontario: Fleuve St-Laurent	morphological	ROM:Ich:BCF-0350-1	BCF-0350-1	EU524691
Labidesthes sicculus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0132-3	BCF-0132-3	EU524692
Labidesthes sicculus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0132-2	BCF-0132-2	EU524693
Labidesthes sicculus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0132-1	BCF-0132-1	EU524694
Labidesthes sicculus	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological	ROM:Ich:BCF-0131-3	BCF-0131-3	EU524695
Labidesthes sicculus	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological	ROM:Ich:BCF-0131-2	BCF-0131-2	EU524696
Labidesthes sicculus	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological	ROM:Ich:BCF-0131-1	BCF-0131-1	EU524697
Labidesthes sicculus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	morphological	ROM:Ich:BCF-0130-2	BCF-0130-2	EU524698
Carpiodes cyprinus	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	tissue	UOG:Bio:BCF-0102-1	BCF-0102-1	EU523924
Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0033-1	BCF-0033-1	EU524451
Carpiodes cyprinus	Canada: Ontario: Lake Erie	morphological	ROM:Ich:BCF-0551-1	BCF-0551-1	EU524452
			ROM:Ich:BCF-0103-3	BCF-0103-3	EU524453
Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphorogram			
Carpiodes cyprinus Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre Canada: Quebec: Fleuve St-Laurent, lac St-Pierre		ROM:Ich:BCF-0103-2	BCF-0103-2	EU524454
		morphological		BCF-0103-2 BCF-0103-1	EU524454 EU524455

Carniadas aunrinus	Canada: Quebec: Baie Missisquoi	tissue	UOG:Bio:BCF-0101-2	DCE 0101 2	EU524457
Carpiodes cyprinus Carpiodes cyprinus	Canada: Quebec: Baie Missisquoi Canada: Quebec: Baie Missisquoi	tissue		BCF-0101-1	EU524458
Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0100-3		EU524459
Carpiodes cyprinus Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0100-2		EU524460
Carpiodes cyprinus Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0100-1		EU524461
Catostomus catostomus	Canada: British Columbia: Fraser river	tissue		BCF-0670-5	EU523925
Catostomus catostomus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0670-4		EU523926
Catostomus catostomus	Canada: British Columbia: Fraser river	tissue		BCF-0670-3	EU523927
Catostomus catostomus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0670-2		EU523928
Catostomus catostomus	Canada: British Columbia: Fraser river	tissue		BCF-0670-1	EU523929
Catostomus catostomus	Canada: Ouebec: Saint Lawrence River St-Nicolas	tissue	UOG:Bio:BCF-0112-1		EU523930
Catostomus catostomus	Canada: Ontario: Lake Ontario			BCF-0523-1	EU524462
Catostomus catostomus	Canada: Ontario: Pine River			BCF-0434-4	EU524463
Catostomus catostomus	Canada: Ontario: Pine River	1 0		BCF-0434-3	EU524464
Catostomus catostomus	Canada: Ontario: Pine River			BCF-0434-2	EU524465
Catostomus catostomus	Canada: Ontario: Pine River			BCF-0434-1	EU524466
Catostomus catostomus	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	tissue		BCF-0266-2	EU524467
Catostomus catostomus	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerne Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue		BCF-0112-2	EU524468
Catostomus catostomus	Canada: Quebec: Fleuve St-Laurent, riviere Siewichias Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue		BCF-0111-3	EU524469
Catostomus catostomus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0111-2		EU524470
Catostomus catostomus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue		BCF-0111-1	EU524470
Catostomus commersonii	Canada: Quebec: Fleuve St-Eautell, Tiviere Richelleu Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)			BCF-0104-1	EU523931
Catostomus commersonii	Canada: New Brunswick: Gapetown	tissue	UOG:Bio:BCF-0579-4		EU524472
Catostomus commersonii	Canada: New Brunswick: Gapetown Canada: New Brunswick: Gapetown	tissue		BCF-0579-3	EU524473
Catostomus commersonii	Canada: New Brunswick: Gapetown Canada: New Brunswick: Gapetown	tissue	UOG:Bio:BCF-0579-2		EU524474
Catostomus commersonii	Canada: New Brunswick: Gapetown	tissue	UOG:Bio:BCF-0579-1		EU524475
Catostomus commersonii	Canada: Ontario: Credit River			BCF-0435-2	EU524476
Catostomus commersonii	Canada: Ontario: Credit River			BCF-0435-1	EU524477
Catostomus commersonii	Canada: Ontario: Lake Ontario			BCF-0426-1	EU524478
Catostomus commersonii	Canada: Ontario: Sydenham River			BCF-0403-2	EU524479
Catostomus commersonii	Canada: Ontario: Sydenham River			BCF-0403-1	EU524480
Catostomus commersonii	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue		BCF-0107-3	EU524481
Catostomus commersonii	Canada: Quebec: Fleuve St-Laurent, lac St-Louis			BCF-0104-4	EU524482
Catostomus commersonii	Canada: Quebec: Fleuve St-Laurent, lac St-Louis			BCF-0104-3	EU524483
Catostomus commersonii	Canada: Quebec: Fleuve St-Laurent, lac St-Louis			BCF-0104-2	EU524484
Catostomus macrocheilus	Canada: British Columbia: Mission creek	tissue	UOG:Bio:BCF-0658-2		EU523932
Catostomus macrocheilus	Canada: British Columbia: Salwein creek	tissue	UOG:Bio:BCF-0658-1		EU523933
Catostomus platyrhynchus	Canada: Saskatchewan: Belly River, Saskatchewan River	tissue	UOG:Bio:BCF-0874-1		EU522454
Catostomus platyrhynchus	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-5		EU523934
Catostomus platyrhynchus	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-4	BCF-0779-4	EU523935
Catostomus platyrhynchus	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-3		EU523936
Catostomus platyrhynchus	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue		BCF-0779-2	EU523937
Catostomus platyrhynchus	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-1		EU523938
Erimyzon sucetta	Canada: Ontario: Long Point Bay			BCF-0514-1	EU524567
Hypentelium nigricans	Canada: Ontario: Big Otter Creek	1 0		BCF-0413-1	EU524667
Hypentelium nigricans	Canada: Ontario: Grand River			BCF-0393-4	EU524668
Hypentelium nigricans	Canada: Ontario: Grand River	1 0		BCF-0393-3	EU524669
Hypentelium nigricans	Canada: Ontario: Grand River			BCF-0393-2	EU524670
Hypentelium nigricans	Canada: Ontario: Grand River	morphological	ROM:Ich:BCF-0393-1	BCF-0393-1	EU524671
Hypentelium nigricans	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-5	BCF-0376-5	EU524672
Hypentelium nigricans	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-4	BCF-0376-4	EU524673
Hypentelium nigricans	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-3	BCF-0376-3	EU524674
Hypentelium nigricans	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-1	BCF-0376-1	EU524675
Ictiobus cyprinellus	Canada: Ontario: Lake Ontario	morphologica	ROM:Ich:BCF-0488-1	BCF-0488-1	EU524687
Ictiobus cyprinellus	Canada: Ontario: Welland River	morphological	ROM:Ich:BCF-0502-1	BCF-0502-1	EU524688
Ictiobus niger	United States: Kansas	tissue	UOG:Bio:BCF-0707-1	BCF-0707-1	EU524107
Minytrema melanops	Canada: Ontario: East shore, Down Island	tissue	UOG:Bio:BCF-0566-5	BCF-0566-5	EU524839
Minytrema melanops	Canada: Ontario: Detroit River	tissue	UOG:Bio:BCF-0566-23	BCF-0566-23	EU524840
Minytrema melanops	Canada: Ontario: Detroit River	tissue	UOG:Bio:BCF-0566-21	BCF-0566-21	EU524841
Minytrema melanops	Canada: Ontario: St Clair river	tissue	UOG:Bio:BCF-0566-17	BCF-0566-17	EU524842
Minytrema melanops	Canada: Ontario: St Clair river	tissue	UOG:Bio:BCF-0566-16	BCF-0566-16	EU524843
Minytrema melanops	Canada: Ontario: St Clair river	tissue	UOG:Bio:BCF-0566-15	BCF-0566-15	EU524844
Minytrema melanops	Canada: Ontario: St Clair river	tissue	UOG:Bio:BCF-0566-12	BCF-0566-12	EU524845

Moxostoma anisurum	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological ROM:Ich:BCF-0095-1 BCF-0095-1 EU52414	16
Moxostoma anisurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0415-3 BCF-0415-3 EU52482	
Moxostoma anisurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0415-1 BCF-0415-1 EU5246-	
Moxostoma anisurum	Canada: Ontario: Sydennam River Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0413-1 BCF-0413-1 EU3246-2 morphological ROM:Ich:BCF-0368-5 BCF-0368-5 EU5248-2	
Moxostoma anisurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0368-4 BCF-0368-4 EU5248-	
Moxostoma anisurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0368-1 BCF-0368-1 EU52485	
Moxostoma anisurum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0906-2 BCF-0906-2 EU52485	
Moxostoma anisurum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0096-1 BCF-0096-1 EU52485	
Moxostoma anisurum	Canada: Quebec: Fieuve St-Eaurent, riviere Rieneneu Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0094-3 BCF-0094-3 EU52485	
Moxostoma anisurum	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0094-2 BCF-0094-2 EU52485	
Moxostoma anisurum	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0094-1 BCF-0094-1 EU52485	
Moxostoma carinatum	Canada: Quebec: Riviere Richelieu, Saint-Ours	tissue UOG:Bio:BCF-0098-1 BCF-0098-1 EU52414	
Moxostoma carinatum	Canada: Quebec: Riviere Richelieu, Saint-Ours	tissue UOG:Bio:BCF-0099-1 BCF-0099-1 EU52414	
Moxostoma carinatum	Canada: Ontario: Trent River	morphological ROM:Ich:BCF-0531-1 BCF-0531-1 EU52485	
Moxostoma carinatum	Canada: Ontario: Trent River	morphological ROM:Ich:BCF-0516-2 BCF-0516-2 EU52485	
Moxostoma carinatum	Canada: Ontario: Madawaska River	morphological ROM:Ich:BCF-0445-1 BCF-0445-1 EU52485	
Moxostoma carinatum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0099-4 BCF-0099-4 EU52485	59
Moxostoma carinatum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0099-2 BCF-0099-2 EU52486	
Moxostoma duquesnii	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0517-6 BCF-0517-6 EU52486	
Moxostoma duquesnii	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0517-5 BCF-0517-5 EU52486	62
Moxostoma duquesnii	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0517-4 BCF-0517-4 EU52486	63
Moxostoma duquesnii	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0517-3 BCF-0517-3 EU52486	64
Moxostoma duquesnii	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0517-2 BCF-0517-2 EU52486	65
Moxostoma duquesnii	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0517-1 BCF-0517-1 EU52486	66
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-6 BCF-0416-6 EU52486	67
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-5 BCF-0416-5 EU52486	68
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-4 BCF-0416-4 EU52486	69
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-3 BCF-0416-3 EU52487	70
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-2 BCF-0416-2 EU52487	71
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-1 BCF-0416-1 EU52487	72
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-4 BCF-0397-4 EU52487	73
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-3 BCF-0397-3 EU52487	74
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-2 BCF-0397-2 EU52487	75
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-1 BCF-0397-1 EU52487	76
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0617-15 BCF-0617-15 EU52487	77
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0617-14 BCF-0617-14 EU52487	78
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0617-13 BCF-0617-13 EU52487	79
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-9 BCF-0617-9 EU52488	
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-8 BCF-0617-8 EU52488	
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-7 BCF-0617-7 EU52488	82
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-6 BCF-0617-6 EU52488	
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-5 BCF-0617-5 EU52488	
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-4 BCF-0617-4 EU52488	
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-3 BCF-0617-3 EU52488	
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-2 BCF-0617-2 EU52488	
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-1 BCF-0617-1 EU52488	
•	Canada: Quebec: Saint Lawrence River St-Nicolas	tissue UOG:Bio:BCF-0091-2 BCF-0091-2 EU52414	
•	n Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0532-5 BCF-0532-5 EU52488	
•	n Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0532-4 BCF-0532-4 EU52489	
•	n Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0532-3 BCF-0532-3 EU52489	
•	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0490-1 BCF-0490-1 EU52489	
•	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0093-3 BCF-0093-3 EU52489	
•	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0093-2 BCF-0093-2 EU52489	
•	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu Canada: Quebec: Fleuve St-Laurent, lac St-Louis	tissue UOG:Bio:BCF-0093-1 BCF-0093-1 EU52489 morphological ROM:Ich:BCF-0092-3 BCF-0092-3 EU52489	
•	1 Canada: Quebec: Fleuve St-Laurent, lac St-Louis 1 Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0092-3 BCF-0092-3 EU52489 morphological ROM:Ich:BCF-0092-2 BCF-0092-2 EU52489	
•	1 Canada: Quebec: Fleuve St-Laurent, lac St-Louis 1 Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0092-1 BCF-0092-1 EU52489	
•	1 Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0091-4 BCF-0091-4 EU52489	
•	1 Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas 1 Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0091-3 BCF-0091-3 EU52490	
•	1 Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0377-2 BCF-0377-2 EU52490	
•	1 Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0377-1 BCF-0377-1 EU52490	
•	1 Canada: Ontario: Trent River	morphological ROM:Ich:BCF-0516-1 BCF-0516-1 EU52490	
Moxostoma valenciennesi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0097-1 BCF-0097-1 EU52415	
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Moxostoma valenciennesi	Canada: Ontario: Lake Simcoe	morphological ROM:Ich:BCF-0533-3	BCF-0533-3 EU524904
Moxostoma valenciennesi	Canada: Ontario: Lake Simcoe	morphological ROM:Ich:BCF-0533-1	BCF-0533-1 EU524905
Moxostoma valenciennesi	Canada: Ontario: Crowe Lake	morphological ROM:Ich:BCF-0525-4	BCF-0525-4 EU524906
Moxostoma valenciennesi	Canada: Ontario: Crowe Lake	morphological ROM:Ich:BCF-0525-3	BCF-0525-3 EU524907
Moxostoma valenciennesi	Canada: Ontario: Crowe Lake	morphological ROM:Ich:BCF-0525-2	BCF-0525-2 EU524908
Moxostoma valenciennesi	Canada: Ontario: Crowe Lake	morphological ROM:Ich:BCF-0525-1	BCF-0525-1 EU524909
Moxostoma valenciennesi	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0520-2	BCF-0520-2 EU524910
Moxostoma valenciennesi	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0520-1	BCF-0520-1 EU524911
Moxostoma valenciennesi	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0491-1	BCF-0491-1 EU524912
Lepomis auritus	Canada: New Brunswick: Yoho Lake	tissue UOG:Bio:BCF-0576-5	BCF-0576-5 EU524700
Lepomis auritus	Canada: New Brunswick: Yoho Lake	tissue UOG:Bio:BCF-0576-4	BCF-0576-4 EU524701
Lepomis auritus	Canada: New Brunswick: Yoho Lake	tissue UOG:Bio:BCF-0576-3	BCF-0576-3 EU524702
Lepomis auritus	Canada: New Brunswick: Yoho Lake	tissue UOG:Bio:BCF-0576-2	
Lepomis auritus	Canada: New Brunswick: Yoho Lake	tissue UOG:Bio:BCF-0576-1	BCF-0576-1 EU524704
Lepomis cyanellus	Canada: Ontario: Humber River	morphological ROM:Ich:BCF-0477-1	BCF-0477-1 EU524705
Lepomis cyanellus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0414-8	BCF-0414-8 EU524706
Lepomis cyanellus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0414-7	BCF-0414-7 EU524707
Lepomis cyanellus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0414-6	BCF-0414-6 EU524708
Lepomis cyanellus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0414-5	BCF-0414-5 EU524709
Lepomis cyanellus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0414-4	BCF-0414-4 EU524710
Lepomis cyanellus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0414-3	BCF-0414-3 EU524711
Lepomis cyanellus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0414-2	BCF-0414-2 EU524712
Lepomis cyanellus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0414-1	BCF-0414-1 EU524713
Lepomis gibbosus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0151-1	BCF-0151-1 EU524123
Lepomis gibbosus	Canada: Ontario: Fleuve St-Laurent	tissue UOG:Bio:BCF-0346-2	BCF-0346-2 EU524714
Lepomis gibbosus	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0442-3	BCF-0442-3 EU524715
Lepomis gibbosus	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0442-2	BCF-0442-2 EU524716
Lepomis gibbosus	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0442-1	BCF-0442-1 EU524717
Lepomis gibbosus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0217-2	BCF-0217-2 EU524718
Lepomis gibbosus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0217-1	BCF-0217-1 EU524719
Lepomis gibbosus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0154-3	BCF-0154-3 EU524720
Lepomis gibbosus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0154-2	BCF-0154-2 EU524721
Lepomis gibbosus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0154-1	BCF-0154-1 EU524722
Lepomis gibbosus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0152-3	BCF-0152-3 EU524723
Lepomis gibbosus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0152-2	BCF-0152-2 EU524724
Lepomis gibbosus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0152-1	BCF-0152-1 EU524725
Lepomis humilis	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0556-2	BCF-0556-2 EU524726
Lepomis humilis	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0556-1	BCF-0556-1 EU524727
Lepomis humilis	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0552-4	BCF-0552-4 EU524728
Lepomis humilis	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0552-3	BCF-0552-3 EU524729
Lepomis humilis	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0552-2	BCF-0552-2 EU524730
Lepomis humilis	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0552-1	BCF-0552-1 EU524731
Lepomis macrochirus	Canada: Ontario: Buckhorn Lake	morphological ROM:Ich:BCF-0432-3	BCF-0432-3 EU524732
Lepomis macrochirus	Canada: Ontario: Buckhorn Lake	morphological ROM:Ich:BCF-0432-2	BCF-0432-2 EU524733
Lepomis macrochirus	Canada: Ontario: Buckhorn Lake	morphological ROM:Ich:BCF-0432-1	BCF-0432-1 EU524734
Lepomis macrochirus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0346-4	BCF-0346-4 EU524735
Lepomis macrochirus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0346-3	BCF-0346-3 EU524736
Lepomis macrochirus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0346-1	BCF-0346-1 EU524737
Lepomis macrochirus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0213-4	BCF-0213-4 EU524738
Lepomis macrochirus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0213-3	BCF-0213-3 EU524739
Lepomis macrochirus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0213-2	BCF-0213-2 EU524740
Lepomis macrochirus	Canada: Ontario: Buckhorn Lake	morphological ROM:Ich:BCF-0432-4	BCF-0432-4 EU524741
Lepomis megalotis	Canada: Quebec: Riviere Chateaugay	morphological ROM:Ich:BCF-0150-1	BCF-0150-1 EU524124
Lepomis megalotis	Canada: Quebec: Fleuve St-Laurent, riviere Chateaugay	morphological ROM:Ich:BCF-0150-5	BCF-0150-5 EU524742
Lepomis megalotis	Canada: Quebec: Fleuve St-Laurent, riviere Chateaugay	morphological ROM:Ich:BCF-0150-4	BCF-0150-4 EU524743
Lepomis megalotis	Canada: Quebec: Fleuve St-Laurent, riviere Chateaugay	morphological ROM:Ich:BCF-0150-3	BCF-0150-3 EU524744
Lepomis megalotis	Canada: Quebec: Fleuve St-Laurent, riviere Chateaugay	morphological ROM:Ich:BCF-0150-2	BCF-0150-2 EU524745
Ambloplites rupestris	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0159-1	BCF-0159-1 EU523904
Ambloplites rupestris	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0390-4	BCF-0390-4 EU524407
Ambloplites rupestris	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0390-3	BCF-0390-3 EU524408
Ambloplites rupestris	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0390-2	BCF-0390-2 EU524409
Ambloplites rupestris	Canada: Ontario: Lk. Huron-Waubuno Ch.	morphological ROM:Ich:BCF-0344-3	BCF-0344-3 EU524410
Ambloplites rupestris	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0220-2	BCF-0220-2 EU524411

Ambloplites rupestris	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu		UOG:Bio:BCF-0162-3	BCF-0162-3	EU524412
Ambloplites rupestris	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu		UOG:Bio:BCF-0162-2		EU524413
Ambloplites rupestris	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu		UOG:Bio:BCF-0162-1	BCF-0162-1	EU524414
Micropterus dolomieu	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)		ROM:Ich:BCF-0165-1	BCF-0165-1	EU524131
Micropterus dolomieu	Canada: Ontario: Tea Creek		ROM:Ich:BCF-0444-2	BCF-0444-2	EU524810
Micropterus dolomieu	Canada: Ontario: Tea Creek		ROM:Ich:BCF-0444-1	BCF-0444-1	EU524811
Micropterus dolomieu	Canada: Ontario: Lac Opinicon		ROM:Ich:BCF-0215-3	BCF-0215-3	EU524812
Micropterus dolomieu	Canada: Ontario: Lac Opinicon		ROM:Ich:BCF-0215-2	BCF-0215-2	EU524813
Micropterus dolomieu	Canada: New Brunswick: Nosbonsing	morphological	ROM:Ich:BCF-0175-2	BCF-0175-2	EU524814
Micropterus dolomieu	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre		ROM:Ich:BCF-0173-3	BCF-0173-3	EU524815
Micropterus dolomieu	Canada: Ontario: Wanapitei River		ROM:Ich:BCF-0443-3	BCF-0443-3	EU524816
Micropterus dolomieu	Canada: Ontario: Wanapitei River	morphological	ROM:Ich:BCF-0443-2	BCF-0443-2	EU524817
Micropterus dolomieu	Canada: Ontario: Wanapitei River	morphological	ROM:Ich:BCF-0443-1	BCF-0443-1	EU524818
Micropterus dolomieu	Canada: Ontario: Grand River	morphological	ROM:Ich:BCF-0395-2	BCF-0395-2	EU524819
Micropterus dolomieu	Canada: Ontario: Grand River	morphological	ROM:Ich:BCF-0395-1	BCF-0395-1	EU524820
Micropterus dolomieu	Canada: Quebec: lac Opasatica	morphological	ROM:Ich:BCF-0169-3	BCF-0169-3	EU524821
Micropterus dolomieu	Canada: Quebec: lac Opasatica	morphological	ROM:Ich:BCF-0169-2	BCF-0169-2	EU524822
Micropterus dolomieu	Canada: Quebec: lac Opasatica	morphological	ROM:Ich:BCF-0169-1	BCF-0169-1	EU524823
Micropterus dolomieu	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological	ROM:Ich:BCF-0168-3	BCF-0168-3	EU524824
Micropterus dolomieu	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological	ROM:Ich:BCF-0168-2	BCF-0168-2	EU524825
Micropterus dolomieu	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological	ROM:Ich:BCF-0168-1	BCF-0168-1	EU524826
Micropterus dolomieu	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0165-3	BCF-0165-3	EU524827
Micropterus dolomieu	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0165-2	BCF-0165-2	EU524828
Micropterus salmoides	Canada: Ontario: Lac Opinicon	morphological	ROM:Ich:BCF-0215-1	BCF-0215-1	EU524132
Micropterus salmoides	Canada: Ontario: Lake Simcoe	tissue	UOG:Bio:BCF-0546-1	BCF-0546-1	EU524829
Micropterus salmoides	Canada: Ontario: Cedar Creek	tissue	UOG:Bio:BCF-0511-1	BCF-0511-1	EU524830
Micropterus salmoides	Canada: Ontario: Lac Opinicon	tissue	UOG:Bio:BCF-0219-1	BCF-0219-1	EU524831
Micropterus salmoides	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	tissue	UOG:Bio:BCF-0177-2	BCF-0177-2	EU524832
Micropterus salmoides	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	tissue	UOG:Bio:BCF-0177-1	BCF-0177-1	EU524833
Micropterus salmoides	Canada: Ontario: Tea Creek	morphological	ROM:Ich:BCF-0444-3	BCF-0444-3	EU524834
Micropterus salmoides	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological	ROM:Ich:BCF-0173-2	BCF-0173-2	EU524835
Micropterus salmoides	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological	ROM:Ich:BCF-0173-1	BCF-0173-1	EU524836
Micropterus salmoides	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0171-3	BCF-0171-3	EU524837
Micropterus salmoides	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0171-2	BCF-0171-2	EU524838
Pomoxis annularis	Canada: Ontario: Sydenham River	morphological	ROM:Ich:BCF-0778-1	BCF-0778-1	EU524280
Pomoxis annularis	Canada: Ontario: Welland river, city of welland	tissue	UOG:Bio:BCF-0721-5	BCF-0721-5	EU524281
Pomoxis annularis	Canada: Ontario: Welland river, city of welland	tissue	UOG:Bio:BCF-0721-4	BCF-0721-4	EU524282
Pomoxis annularis	Canada: Ontario: Welland river, city of welland	tissue	UOG:Bio:BCF-0721-2	BCF-0721-2	EU524283
Pomoxis annularis	Canada: Ontario: Welland river, city of welland	tissue	UOG:Bio:BCF-0721-1	BCF-0721-1	EU524284
Pomoxis annularis	Canada: Ontario: Lake Simcoe	morphological	ROM:Ich:BCF-0546-3	BCF-0546-3	EU525096
Pomoxis annularis	Canada: Ontario: Sydenham River	morphological	ROM:Ich:BCF-0423-1	BCF-0423-1	EU525097
Pomoxis nigromaculatus	Canada: Ontario: Welland river, city of welland	tissue	UOG:Bio:BCF-0720-3	BCF-0720-3	EU524285
Pomoxis nigromaculatus	Canada: Ontario: Welland river, city of welland	tissue	UOG:Bio:BCF-0720-2	BCF-0720-2	EU524286
Pomoxis nigromaculatus	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological	ROM:Ich:BCF-0176-1	BCF-0176-1	EU524287
Pomoxis nigromaculatus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological	ROM:Ich:BCF-0546-3	BCF-0546-3	EU525098
Pomoxis nigromaculatus	Canada: Ontario: Lake Simcoe	morphological	ROM:Ich:BCF-0546-2	BCF-0546-2	EU525099
Pomoxis nigromaculatus	Canada: Ontario: Cedar Creek	morphological	ROM:Ich:BCF-0511-2	BCF-0511-2	EU525100
Pomoxis nigromaculatus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0176-3	BCF-0176-3	EU525101
Pomoxis nigromaculatus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0176-2	BCF-0176-2	EU525102
Alosa aestivalis	Canada: Nova Scotia: Grand Lake	tissue	UOG:Bio:BCF-0885-5	BCF-0885-5	EU523894
Alosa aestivalis	Canada: Nova Scotia: Grand Lake	tissue	UOG:Bio:BCF-0885-4	BCF-0885-4	EU523895
Alosa aestivalis	Canada: Nova Scotia: Grand Lake	tissue	UOG:Bio:BCF-0885-3	BCF-0885-3	EU523896
Alosa aestivalis	Canada: Nova Scotia: Grand Lake	tissue	UOG:Bio:BCF-0885-2	BCF-0885-2	EU523897
Alosa aestivalis	Canada: Nova Scotia: Grand Lake	tissue	UOG:Bio:BCF-0885-1	BCF-0885-1	EU523898
Alosa pseudoharengus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0028-2	BCF-0028-2	EU523899
Alosa pseudoharengus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0028-1	BCF-0028-1	EU523900
Alosa pseudoharengus	Canada: Ontario: St Clair River	morphological	ROM:Ich:BCF-0496-3	BCF-0496-3	EU524402
Alosa pseudoharengus	Canada: Ontario: St Clair River	morphological	ROM:Ich:BCF-0496-1	BCF-0496-1	EU524403
Alosa sapidissima	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological	ROM:Ich:BCF-0200-3	BCF-0200-3	EU523901
Alosa sapidissima	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological	ROM:Ich:BCF-0200-2	BCF-0200-2	EU523902
Alosa sapidissima	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological	ROM:Ich:BCF-0200-1	BCF-0200-1	EU523903
Alosa sapidissima	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0026-2	BCF-0026-2	EU524404
Alosa sapidissima	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0026-1	BCF-0026-1	EU524405

Alosa sapidissima	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological ROM:Ich:BCF-0023-3	BCF-0023-3	EU524406
Dorosoma cepedianum	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0499-3	BCF-0023-3 BCF-0499-3	EU524557
Dorosoma cepedianum	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0499-2	BCF-0499-2	EU524558
Dorosoma cepedianum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0499-2	BCF-0499-2 BCF-0404-4	EU524559
Dorosoma cepedianum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0404-2	BCF-0404-4	EU524560
Dorosoma cepedianum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0404-2	BCF-0404-2	EU524561
Dorosoma cepedianum	Canada: Ontario: Sydemian River	morphological ROM:Ich:BCF-0380-5	BCF-0380-5	EU524562
Dorosoma cepedianum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0380-4	BCF-0380-4	EU524563
Dorosoma cepedianum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0380-3	BCF-0380-3	EU524564
Dorosoma cepedianum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0380-2	BCF-0380-2	EU524565
Dorosoma cepedianum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0380-1	BCF-0380-1	EU524566
Cottus aleuticus	United States: Alaska: Bery bay, N Cr	tissue UOG:Bio:BCF-0647-5	BCF-0647-5	EU523991
Cottus aleuticus	United States: Alaska: Bery bay, N Cr	tissue UOG:Bio:BCF-0647-4		EU523992
Cottus aleuticus	United States: Alaska: Bery bay, N Cr	tissue UOG:Bio:BCF-0647-1		EU523993
Cottus asper	Canada: British Columbia: Chonat lake	tissue UOG:Bio:BCF-0676-2		EU523994
Cottus asper	Canada: British Columbia: Chonat lake	tissue UOG:Bio:BCF-0676-1		EU523995
Cottus asper	Canada: British Columbia: Sarita lake	tissue UOG:Bio:BCF-0675-2	BCF-0675-2	EU523996
Cottus asper	Canada: British Columbia: Sarita lake	tissue UOG:Bio:BCF-0675-1	BCF-0675-1	EU523997
Cottus bairdii	Canada: Manitoba: Birch River, Winnipeg River	tissue UOG:Bio:BCF-0834-3	BCF-0834-3	EU522459
Cottus bairdii	Canada: Manitoba: Birch River, Winnipeg River	tissue UOG:Bio:BCF-0834-2	BCF-0834-2	EU522460
Cottus bairdii	Canada: Manitoba: Birch River, Winnipeg River	tissue UOG:Bio:BCF-0834-1	BCF-0834-1	EU522461
Cottus bairdii	Canada: British Columbia: Otter creek	tissue UOG:Bio:BCF-0672-4	BCF-0672-4	EU522455
Cottus bairdii	Canada: British Columbia: Otter creek	tissue UOG:Bio:BCF-0672-3	BCF-0672-3	EU522456
Cottus bairdii	Canada: British Columbia: Otter creek	tissue UOG:Bio:BCF-0672-2	BCF-0672-2	EU522457
Cottus bairdii	Canada: British Columbia: Otter creek	tissue UOG:Bio:BCF-0672-1	BCF-0672-1	EU522458
Cottus bairdii	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological ROM:Ich:BCF-0143-1	BCF-0143-1	EU523998
Cottus bairdii	Canada: Ontario: Lk. Huron-Frazer Bay	morphological ROM:Ich:BCF-0342-7	BCF-0342-7	EU524490
Cottus bairdii	Canada: Ontario: Lk. Huron-Frazer Bay	morphological ROM:Ich:BCF-0342-6	BCF-0342-6	EU524491
Cottus bairdii	Canada: Ontario: Lk. Huron-Frazer Bay	morphological ROM:Ich:BCF-0342-5	BCF-0342-5	EU524492
Cottus bairdii	Canada: Ontario: Lk. Huron-Frazer Bay	morphological ROM:Ich:BCF-0342-3	BCF-0342-3	EU524493
Cottus bairdii	Canada: Ontario: Lk. Huron-Frazer Bay	morphological ROM:Ich:BCF-0342-2	BCF-0342-2	EU524494
Cottus bairdii	Canada: Ontario: Lk. Huron-Frazer Bay	morphological ROM:Ich:BCF-0342-1	BCF-0342-1	EU524495
Cottus bairdii	Canada: Ontario: Marden Creek	morphological ROM:Ich:BCF-0427-4	BCF-0427-4	EU524496
Cottus bairdii	Canada: Ontario: Marden Creek	morphological ROM:Ich:BCF-0427-3	BCF-0427-3	EU524497
Cottus bairdii	Canada: Ontario: Marden Creek	morphological ROM:Ich:BCF-0427-2	BCF-0427-2	EU524498
Cottus bairdii	Canada: Ontario: Marden Creek	morphological ROM:Ich:BCF-0427-1	BCF-0427-1	EU524499
Cottus bairdii	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0145-4	BCF-0145-4	EU524500
Cottus bairdii	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0145-3	BCF-0145-3	EU524501
Cottus bairdii	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0145-2	BCF-0145-2	EU524502
Cottus bairdii	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0145-1	BCF-0145-1	EU524503
Cottus bairdii	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0143-4	BCF-0143-4	EU524504
Cottus bairdii	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0143-3	BCF-0143-3	EU524505
Cottus bairdii	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0143-2	BCF-0143-2	EU524506
Cottus cognatus	Canada: Quebec: Riviere Matane	morphological ROM:Ich:BCF-0140-1	BCF-0140-1	EU523999
Cottus cognatus	Canada: New Brunswick: Mc Quarrie Brook	tissue UOG:Bio:BCF-0577-5	BCF-0577-5	EU524507
Cottus cognatus	Canada: New Brunswick: Mc Quarrie Brook	tissue UOG:Bio:BCF-0577-3		EU524508
Cottus cognatus	Canada: New Brunswick: Mc Quarrie Brook	tissue UOG:Bio:BCF-0577-2	BCF-0577-2	EU524509
Cottus cognatus	Canada: New Brunswick: Mc Quarrie Brook	tissue UOG:Bio:BCF-0577-1		EU524510
Cottus cognatus	Canada: Ontario: Wilmot Creek	morphological ROM:Ich:BCF-0456-5	BCF-0456-5	EU524511
Cottus cognatus	Canada: Ontario: Wilmot Creek	morphological ROM:Ich:BCF-0456-4	BCF-0456-4	EU524512
Cottus cognatus	Canada: Ontario: Wilmot Creek	morphological ROM:Ich:BCF-0456-3	BCF-0456-3	EU524513
Cottus cognatus	Canada: Ontario: Wilmot Creek	morphological ROM:Ich:BCF-0456-2	BCF-0456-2	EU524514
Cottus cognatus	Canada: Quebec: Fleuve St-Laurent, riviere Matane	morphological ROM:Ich:BCF-0140-5	BCF-0140-5	EU524515
Cottus cognatus	Canada: Quebec: Fleuve St. Laurent, riviere Matane	morphological ROM:Ich:BCF-0140-4	BCF-0140-4	EU524516
Cottus cognatus	Canada: Quebec: Fleuve St-Laurent, riviere Matane	morphological ROM:Ich:BCF-0140-3	BCF-0140-3	EU524517
Cottus cognatus	Canada: Quebec: Fleuve St-Laurent, riviere Matane	morphological ROM:Ich:BCF-0140-2	BCF-0140-2	EU524518
Cottus cognatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0144-2	BCF-0144-2	EU524519
Cottus cognatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0144-1	BCF-0144-1	EU524520
Cottus rhotheus	Canada: British Columbia: Pass creek	tissue UOG:Bio:BCF-0674-1	BCF-0674-1	EU524000
Cottus ricei	Canada: Quebec: Saint Laurent River	morphological ROM:Ich:BCF-0884-4	BCF-0884-4	EU522462
Cottus ricei Cottus ricei	Canada: Quebec: Saint Laurent River Canada: Quebec: Saint Laurent River	morphological ROM:Ich:BCF-0884-3 morphological ROM:Ich:BCF-0884-1	BCF-0884-3 BCF-0884-1	EU522463 EU524001
Cottus ricei	Canada: Queoec: Saint Laurent River Canada: Ontario: Lk. Superior-Whitefish Bay	morphological ROM:Ich:BCF-0884-1	BCF-0884-1 BCF-0336-1	EU524521
Cottus 11001	Canada. Onario. Ek. Superior-winteristi Day	morphological KOWLIGH.DCT-0330-1	DC1-0330-1	LU32 1 321

Myoxocephalus quadricornis	s Canada: Ontario: James Bay	morphological ROM:Ich:BCF-0398-1	BCF-0398-1	EU524913
Myoxocephalus thompsonii	Canada: Ontario: Lk. Superior-Whitefish Bay	morphological ROM:Ich:BCF-0337-2	BCF-0337-2	EU524914
Myoxocephalus thompsonii	Canada: Ontario: Lk. Superior-Whitefish Bay	morphological ROM:Ich:BCF-0337-1	BCF-0337-1	EU524915
Myoxocephalus thompsonii	Canada: Ontario: Lk. Huron-Meldrum Bay	morphological ROM:Ich:BCF-0333-3	BCF-0333-3	EU524916
Myoxocephalus thompsonii	Canada: Ontario: Lk. Huron-Meldrum Bay	morphological ROM:Ich:BCF-0333-2	BCF-0333-2	EU524917
Myoxocephalus thompsonii	Canada: Ontario: Lk. Huron-Meldrum Bay	morphological ROM:Ich:BCF-0333-1	BCF-0333-1	EU524918
Acrocheilus alutaceus	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0667-3	BCF-0667-3	EU523892
Acrocheilus alutaceus	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0667-2	BCF-0667-2	EU523893
Campostoma anomalum	Canada: Ontario: Cedar Creek	morphological ROM:Ich:BCF-0549-1	BCF-0549-1	EU524447
Carassius auratus	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0550-3	BCF-0550-3	EU524448
Carassius auratus	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0550-2	BCF-0550-2	EU524449
Carassius auratus	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0550-1	BCF-0550-1	EU524450
Clinostomus elongatus	Canada: Ontario: Silver Creek	morphological ROM:Ich:BCF-0529-1	BCF-0529-1	EU524485
Clinostomus elongatus	Canada: Ontario: Fourteen Mile Creek	tissue UOG:Bio:BCF-0524-5	BCF-0524-5	EU524486
Clinostomus elongatus	Canada: :	tissue UOG:Bio:BCF-0524-2	BCF-0524-2	EU524487
Clinostomus elongatus	Canada: :	tissue UOG:Bio:BCF-0524-1	BCF-0524-1	EU524488
Couesius plumbeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-1	BCF-0051-1	EU524002
Couesius plumbeus	Canada: New Brunswick: Gapetown	morphological ROM:Ich:BCF-0586-1	BCF-0586-1	EU524522
Couesius plumbeus	Canada: Ontario: Sheridan Creek	morphological ROM:Ich:BCF-0429-1	BCF-0429-1	EU524523
Couesius plumbeus	Canada: Ontario: Lk. Huron-McGregor Bay	morphological ROM:Ich:BCF-0343-1	BCF-0343-1	EU524524
Couesius plumbeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	tissue UOG:Bio:BCF-0051-8	BCF-0051-8	EU524525
Couesius plumbeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-7	BCF-0051-7	EU524526
Couesius plumbeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-6	BCF-0051-6	EU524527
Couesius plumbeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-5	BCF-0051-5	EU524528
Couesius plumbeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-4	BCF-0051-4	EU524529
Couesius plumbeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-3	BCF-0051-3	EU524530
Couesius plumbeus Cyprinella spiloptera	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec Canada: Quebec: Fleuve Saint-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0051-2 morphological ROM:Ich:BCF-0070-1	BCF-0051-2 BCF-0070-1	EU524531 EU524004
Cyprinella spiloptera	Canada: Quebec: Fleuve Saint-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0070-1	BCF-0070-1 BCF-0070-2	EU524004 EU524005
Cyprinella spiloptera	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0070-2	BCF-0070-2 BCF-0379-3	EU524539
Cyprinella spiloptera	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0379-2	BCF-0379-2	EU524540
Cyprinella spiloptera	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0379-1	BCF-0379-1	EU524541
Cyprinella spiloptera	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-4	BCF-0369-4	EU524542
Cyprinella spiloptera	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-3	BCF-0369-3	EU524543
Cyprinella spiloptera	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-2	BCF-0369-2	EU524544
Cyprinella spiloptera	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-1	BCF-0369-1	EU524545
Cyprinella spiloptera	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0289-1	BCF-0289-1	EU524546
Cyprinella spiloptera	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0070-4	BCF-0070-4	EU524547
Cyprinella spiloptera	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0070-3	BCF-0070-3	EU524548
Cyprinus carpio	Canada: Quebec: Lac Saint-Pierre, Pointe Yamachiche	tissue UOG:Bio:BCF-0048-1	BCF-0048-1	EU524006
Cyprinus carpio	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-4	BCF-0049-4	EU524549
Cyprinus carpio	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-3	BCF-0049-3	EU524550
Cyprinus carpio	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-2	BCF-0049-2	EU524551
Cyprinus carpio	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-1	BCF-0049-1	EU524552
Cyprinus carpio	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0048-3	BCF-0048-3	EU524553
Cyprinus carpio	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0047-3	BCF-0047-3	EU524554
Cyprinus carpio	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0047-2		EU524555
Cyprinus carpio	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0047-1	BCF-0047-1	EU524556
Exoglossum maxillingua	Canada: Quebec: Riviere Becancour	morphological ROM:Ich:BCF-0052-1	BCF-0052-1	EU524057
Exoglossum maxillingua	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-5	BCF-0052-5	EU524613
Exoglossum maxillingua	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-4	BCF-0052-4	EU524614
Exoglossum maxillingua	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-3	BCF-0052-3	EU524615
Exoglossum maxillingua	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-2	BCF-0052-2	EU524616
Hybognathus argyritis	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-7	BCF-0841-7	EU524069
Hybognathus argyritis Hybognathus argyritis	United States: Missouri: Milk River United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-6 tissue UOG:Bio:BCF-0841-5		EU524070 EU524071
Hybognathus argyritis	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-4		EU324071 EU524072
Hybognathus argyritis	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-3		EU524072 EU524073
Hybognathus argyritis	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-2		EU524073 EU524074
Hybognathus argyritis	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-1	BCF-0841-1	EU522464
Hybognathus hankinsoni	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-5	BCF-0698-5	EU524075
Hybognathus hankinsoni	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-4	BCF-0698-4	EU524076
Hybognathus hankinsoni	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-3	BCF-0698-3	EU524077
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Hybognathus hankinsoni	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-2 BCF-0698-2 EU524078
Hybognathus hankinsoni	United States: Missouri: Rock creek United States: Missouri: Rock creek	tissue UOG:Bio:BCF-0842-2 BCF-0842-2 EU524079
Hybognathus hankinsoni		tissue UOG:Bio:BCF-0842-1 BCF-0842-1 EU524080 morphological ROM:Ich:BCF-0053-2 BCF-0053-2 EU524081
Hybognathus hankinsoni	Canada: Quebec: Ruisseau Charette United States: Missouri: Rock creek	
Hybognathus placitus	United States: Missouri: Rock creek United States: Missouri: Rock creek	
Hybognathus placitus Hybognathus placitus	United States: Missouri: Rock creek United States: Missouri: Rock creek	tissue UOG:Bio:BCF-0844-2 BCF-0844-2 EU524083 tissue UOG:Bio:BCF-0844-1 BCF-0844-1 EU524084
Hybognathus regius	Canada: Quebec: Lac Saint-Pierre, Pointe Yamachiche	morphological ROM:Ich:BCF-0054-1 BCF-0054-1 EU524085
Hybognathus regius	Canada: Quebec: Fleuve Saint-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0054-1 BCF-0054-1 EU524086
Hybognathus regius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0053-1 BCF-0053-1 EU524080
Hybognathus regius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0054-7 BCF-0054-7 EU524663
Hybognathus regius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0054-4 BCF-0054-4 EU524664
Hybognathus regius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0054-3 BCF-0054-3 EU524665
Hybognathus regius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0054-2 BCF-0054-2 EU524666
Luxilus chrysocephalus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0489-1 BCF-0489-1 EU524758
Luxilus chrysocephalus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0406-5 BCF-0406-5 EU524759
Luxilus chrysocephalus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0406-4 BCF-0406-4 EU524760
Luxilus chrysocephalus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0406-3 BCF-0406-3 EU524761
Luxilus chrysocephalus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0382-4 BCF-0382-4 EU524762
Luxilus chrysocephalus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0382-2 BCF-0382-2 EU524763
Luxilus chrysocephalus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0382-1 BCF-0382-1 EU524764
Luxilus cornutus	Canada: Quebec: Ruisseau Charette	morphological ROM:Ich:BCF-0053-1 BCF-0053-1 EU524126
Luxilus cornutus	Canada: Quebec: Lac aux Sables	morphological ROM:Ich:BCF-0064-1 BCF-0064-1 EU524127
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, ruisseau Charette	morphological ROM:Ich:BCF-0053-3 BCF-0053-3 EU524765
Luxilus cornutus	Canada: New Brunswick: Mc Quarrie Brook	tissue UOG:Bio:BCF-0584-3 BCF-0584-3 EU524766
Luxilus cornutus	Canada: New Brunswick: Mc Quarrie Brook	tissue UOG:Bio:BCF-0584-2 BCF-0584-2 EU524767
Luxilus cornutus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0407-3 BCF-0407-3 EU524768
Luxilus cornutus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0407-2 BCF-0407-2 EU524769
Luxilus cornutus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0407-1 BCF-0407-1 EU524770
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, riviere St-Charles	morphological ROM:Ich:BCF-0233-3 BCF-0233-3 EU524771
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, riviere St-Charles	morphological ROM:Ich:BCF-0233-2 BCF-0233-2 EU524772
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, riviere St-Charles	morphological ROM:Ich:BCF-0233-1 BCF-0233-1 EU524773
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	tissue UOG:Bio:BCF-0230-4 BCF-0230-4 EU524774
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0230-2 BCF-0230-2 EU524775
Luxilus cornutus	Canada: Quebec: lac aux Sables	morphological ROM:Ich:BCF-0064-2 BCF-0064-2 EU524776
Luxilus cornutus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0406-6 BCF-0406-6 EU524777
Luxilus cornutus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0406-2 BCF-0406-2 EU524778
Luxilus cornutus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0406-1 BCF-0406-1 EU524779
Luxilus cornutus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0382-6 BCF-0382-6 EU524780
Luxilus cornutus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0382-5 BCF-0382-5 EU524781
Luxilus cornutus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0382-3 BCF-0382-3 EU524782
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, ruisseau Charette	morphological ROM:Ich:BCF-0053-7 BCF-0053-7 EU524783
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, ruisseau Charette	morphological ROM:Ich:BCF-0053-6 BCF-0053-6 EU524784
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, ruisseau Charette	morphological ROM:Ich:BCF-0053-5 BCF-0053-5 EU524785
Luxilus cornutus	Canada: Quebec: Fleuve St-Laurent, ruisseau Charette	morphological ROM:Ich:BCF-0053-4 BCF-0053-4 EU524786
Lythrurus umbratilis	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0408-9 BCF-0408-9 EU524787
Lythrurus umbratilis	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0408-8 BCF-0408-8 EU524788
Lythrurus umbratilis	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0408-7 BCF-0408-7 EU524789
Lythrurus umbratilis	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0408-5 BCF-0408-5 EU524790
Lythrurus umbratilis	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0408-4 BCF-0408-4 EU524791
Lythrurus umbratilis	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0408-10 BCF-0408-10 EU524792
Lythrurus umbratilis	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0408-1 BCF-0408-1 EU524793
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-8 BCF-0553-8 EU524794
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-7 BCF-0553-7 EU524795
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-6 BCF-0553-6 EU524796
Macrhybopsis storeriana Macrhybopsis storeriana	Canada: Ontario: Lake Erie Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-5 BCF-0553-5 EU524797 morphological ROM:Ich:BCF-0553-4 BCF-0553-4 EU524798
Macrhybopsis storeriana Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-4 BCF-0553-4 EU524798 morphological ROM:Ich:BCF-0553-3 BCF-0553-3 EU524799
Macrhybopsis storeriana Macrhybopsis storeriana	Canada: Ontario: Lake Erie Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-3 BCF-0553-3 EU524/99
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0533-2 BCF-0533-2 EU324800
Margariscus margarita	Canada: Quebec: Lac Ecarte	morphological ROM:Ich:BCF-0333-1 BCF-0333-1 EU324801 BCF-0333-1 EU524128
Margariscus margarita	Canada: Ontario: Wetland 14	tissue UOG:Bio:BCF-0458-2 BCF-0458-2 EU524802
Margariscus margarita	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	morphological ROM:Ich:BCF-0090-4 BCF-0090-4 EU524803
- In Sur Isous margarita	au. Queste. Floure of Educent, fiviere Renemen	

Margariscus margarita	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	morphological ROM:Ich:BCF-0090-2 BCF-0090-2 EU524804
Margariscus margarita	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	morphological ROM:Ich:BCF-0090-1 BCF-0090-1 EU524805
Margariscus margarita	Canada: Quebec: lac Ecarte	morphological ROM:Ich:BCF-0089-13 BCF-0089-13 EU524806
Margariscus margarita	Canada: Quebec: lac Ecarte	morphological ROM:Ich:BCF-0089-12 BCF-0089-12 EU524807
Margariscus margarita	Canada: Quebec: lac Ecarte	morphological ROM:Ich:BCF-0089-11 BCF-0089-11 EU524808
Margariscus margarita	Canada: Quebec: lac Ecarte	morphological ROM:Ich:BCF-0089-10 BCF-0089-10 EU524809
Mylocheilus caurinus	Canada: British Columbia: North Thompson	tissue UOG:Bio:BCF-0684-2 BCF-0684-2 EU524151
Mylocheilus caurinus	Canada: British Columbia: Chebalis river	tissue UOG:Bio:BCF-0660-3 BCF-0660-3 EU524152
Mylocheilus caurinus	Canada: British Columbia: Chebalis river	tissue UOG:Bio:BCF-0660-2 BCF-0660-2 EU524153
Nocomis biguttatus	Canada: Manitoba: Birch River, Winnipeg River	tissue UOG:Bio:BCF-0833-4 BCF-0833-4 EU524157
Nocomis biguttatus	Canada: Manitoba: Birch River, Winnipeg River	tissue UOG:Bio:BCF-0833-3 BCF-0833-3 EU524158
Nocomis biguttatus	Canada: Manitoba: Birch River, Winnipeg River	tissue UOG:Bio:BCF-0833-2 BCF-0833-2 EU524159
Nocomis biguttatus	Canada: Manitoba: Birch River, Winnipeg River	tissue UOG:Bio:BCF-0833-1 BCF-0833-1 EU524160
Nocomis biguttatus	Canada: Ontario: St Clair River	morphological ROM:Ich:BCF-0563-2 BCF-0563-2 EU524921
Nocomis biguttatus	Canada: Ontario: St Clair River	morphological ROM:Ich:BCF-0563-1 BCF-0563-1 EU524922
Nocomis biguttatus	Canada: Ontario: Fairchild Creek Tributary	morphological ROM:Ich:BCF-0506-1 BCF-0506-1 EU524923
Nocomis micropogon	Canada: Ontario: Humber River	morphological ROM:Ich:BCF-0479-1 BCF-0479-1 EU524924
Nocomis micropogon	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0383-1 BCF-0383-1 EU524925
Notemigonus crysoleucas	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0058-1 BCF-0058-1 EU524161
Notemigonus crysoleucas	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0583-4 BCF-0583-4 EU524926
Notemigonus crysoleucas	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0583-3 BCF-0583-3 EU524927
Notemigonus crysoleucas	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0583-2 BCF-0583-2 EU524928
Notemigonus crysoleucas	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0583-1 BCF-0583-1 EU524929
Notemigonus crysoleucas	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0367-2 BCF-0367-2 EU524930
Notemigonus crysoleucas	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0367-1 BCF-0367-1 EU524931
Notemigonus crysoleucas	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0354-1 BCF-0354-1 EU524932
Notemigonus crysoleucas	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0059-3 BCF-0059-3 EU524933
Notemigonus crysoleucas	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0059-2 BCF-0059-2 EU524934
Notemigonus crysoleucas	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0059-1 BCF-0059-1 EU524935
Notemigonus crysoleucas	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0058-2 BCF-0058-2 EU524936 morphological ROM:Ich:BCF-005810 BCF-005810 EU524937
Notemigonus crysoleucas	Canada: Quebec: Marais St-Eugene Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	
Notemigonus crysoleucas Notemigonus crysoleucas	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0056-3 BCF-0056-3 EU524938 tissue UOG:Bio:BCF-0056-2 BCF-0056-2 EU524939
Notemigonus crysoleucas	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0056-1 BCF-0056-1 EU524940
Notropis anogenus	Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0760-8 BCF-0760-8 EU524162
Notropis anogenus	Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0760-7 BCF-0760-7 EU524163
Notropis anogenus	Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0760-6 BCF-0760-6 EU524164
Notropis anogenus	Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0760-5 BCF-0760-5 EU524165
Notropis anogenus	Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0760-3 BCF-0760-3 EU524166
Notropis anogenus	Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0760-2 BCF-0760-2 EU524167
Notropis anogenus	Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0760-1 BCF-0760-1 EU524168
Notropis anogenus	Canada: Ontario: Lake Huron, Au sable Channel	morphological ROM:Ich:BCF-0572-4 BCF-0572-4 EU524941
Notropis anogenus	Canada: Ontario: Lake Huron, Au sable Channel	morphological ROM:Ich:BCF-0572-3 BCF-0572-3 EU524942
Notropis anogenus	Canada: Ontario: Lake Huron, Au sable Channel	morphological ROM:Ich:BCF-0572-2 BCF-0572-2 EU524943
Notropis anogenus	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0506-4 BCF-0506-4 EU524944
Notropis anogenus	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0506-2 BCF-0506-2 EU524945
Notropis anogenus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0353-4 BCF-0353-4 EU524946
Notropis anogenus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0353-3 BCF-0353-3 EU524947
Notropis anogenus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0353-2 BCF-0353-2 EU524948
Notropis anogenus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0353-1 BCF-0353-1 EU524949
Notropis atherinoides	Canada: Quebec: Archipelles du Lac Saint-Pierre	morphological ROM:Ich:BCF-0256-1 BCF-0256-1 EU524169
Notropis atherinoides	Canada: Quebec: Lac Saint-Pierre, Pointe Yamachiche	morphological ROM:Ich:BCF-0061-1 BCF-0061-1 EU524170
Notropis atherinoides	Canada: Quebec: Lac Joannes	morphological ROM:Ich:BCF-0257-1 BCF-0257-1 EU524171
Notropis atherinoides	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0366-4 BCF-0366-4 EU524950
Notropis atherinoides	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0366-3 BCF-0366-3 EU524951
Notropis atherinoides	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0366-2 BCF-0366-2 EU524952
Notropis atherinoides	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0366-1 BCF-0366-1 EU524953
Notropis atherinoides	Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0322-4 BCF-0322-4 EU524954
Notropis atherinoides	Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0322-3 BCF-0322-3 EU524955
Notropis atherinoides	Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0322-2 BCF-0322-2 EU524956
Notropis atherinoides	Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0322-1 BCF-0322-1 EU524957
Notropis atherinoides Notropis atherinoides	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0256-4 BCF-0256-4 EU524958 morphological ROM:Ich:BCF-0256-3 BCF-0256-3 EU524959
rouopis amerinoues	Canada. Quedec. Ficure 5t-Laurent, Lac St-Fielle	morphological KOIVI.ICII.DCT-0230-3 DCT-0230-3 EU324939

Notropis atherinoides	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0062-3	BCF-0062-3	EU524960
Notropis atherinoides	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0062-2	BCF-0062-2	EU524961
Notropis atherinoides	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0062-1	BCF-0062-1	EU524962
Notropis bifrenatus	Canada: Quebec: Lac Saint-Paul	morphological ROM:Ich:BCF-0201-1	BCF-0201-1	EU524172
Notropis bifrenatus	Canada: Quebec: Marais Saint-Eugene	morphological ROM:Ich:BCF-0255-1	BCF-0255-1	EU524173
Notropis bifrenatus	Canada: Quebec: Marais Saint-Eugene	morphological ROM:Ich:BCF-0255-2	BCF-0255-2	EU524174
Notropis bifrenatus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0255-6	BCF-0255-6	EU524963
Notropis bifrenatus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0255-5	BCF-0255-5	EU524964
Notropis bifrenatus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0255-4	BCF-0255-4	EU524965
Notropis bifrenatus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0255-3	BCF-0255-3	EU524966
Notropis bifrenatus	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0201-4	BCF-0201-4	EU524967
Notropis bifrenatus	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0201-3	BCF-0201-3	EU524968
Notropis bifrenatus	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0201-2	BCF-0201-2	EU524969
Notropis buchanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-6	BCF-0409-6	EU524970
Notropis buchanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-5	BCF-0409-5	EU524971
Notropis buchanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-4	BCF-0409-4	EU524972
Notropis buchanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-3	BCF-0409-3	EU524973
Notropis buchanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-2	BCF-0409-2	EU524974
Notropis buchanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-1	BCF-0409-1	EU524975
•	Canada: Ontario: Sydeiliain River	1 0	BCF-0385-6	
Notropis buchanani		morphological ROM:Ich:BCF-0385-6		EU524976
Notropis buchanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-5	BCF-0385-5	EU524977
Notropis buchanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-4	BCF-0385-4	EU524978
Notropis buchanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-3	BCF-0385-3	EU524979
Notropis buchanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-2	BCF-0385-2	EU524980
Notropis heterodon	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological ROM:Ich:BCF-0066-1	BCF-0066-1	EU524175
Notropis heterodon	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0352-2	BCF-0352-2	EU524981
Notropis heterodon	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0352-1	BCF-0352-1	EU524982
Notropis heterodon	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0066-3	BCF-0066-3	EU524983
Notropis heterodon	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0066-2	BCF-0066-2	EU524984
Notropis heterodon	Canada: Ontario: Fairchild Creek Tributary	morphological ROM:Ich:BCF-0507-4	BCF-0507-4	EU524985
Notropis heterodon	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0507-3	BCF-0507-3	EU524986
Notropis heterodon	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0507-2	BCF-0507-2	EU524987
Notropis heterodon	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0507-1	BCF-0507-1	EU524988
Notropis heterodon	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0352-5	BCF-0352-5	EU524989
Notropis heterodon	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0352-4	BCF-0352-4	EU524990
Notropis heterodon	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0352-3	BCF-0352-3	EU524991
Notropis heterolepis	Canada: New Brunswick: Yoho Lake	morphological ROM:Ich:BCF-0587-3	BCF-0587-3	EU524992
Notropis heterolepis	Canada: New Brunswick: Yoho Lake	morphological ROM:Ich:BCF-0587-2	BCF-0587-2	EU524993
Notropis heterolepis	Canada: New Brunswick: Yoho Lake	morphological ROM:Ich:BCF-0587-1	BCF-0587-1	EU524994
Notropis heterolepis	Canada: Ontario: Westward Lake	morphological ROM:Ich:BCF-0535-2	BCF-0535-2	EU524995
Notropis heterolepis	Canada: Ontario: Westward Lake	morphological ROM:Ich:BCF-0535-1	BCF-0535-1	EU524996
Notropis heterolepis	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0438-3	BCF-0438-3	EU524997
Notropis heterolepis	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0438-2	BCF-0438-2	EU524998
Notropis heterolepis	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0438-1	BCF-0438-1	EU524999
Notropis hudsonius	Canada: Quebec: Lac Saint-Pierre, Pointe Yamachiche	morphological ROM:Ich:BCF-0050-1	BCF-0050-1	EU524176
Notropis hudsonius	Canada: Ontario: St Clair River	morphological ROM:Ich:BCF-0526-2	BCF-0526-2	EU525000
Notropis hudsonius	Canada: Ontario: St Clair River	morphological ROM:Ich:BCF-0520-2	BCF-0526-1	EU525000 EU525001
Notropis hudsonius	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0362-3	BCF-0362-3	EU525001
	Canada: Ontario: Lake Erie			
Notropis hudsonius		morphological ROM:Ich:BCF-0362-2	BCF-0362-2	EU525003
Notropis hudsonius	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0362-1	BCF-0362-1	EU525004
Notropis hudsonius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0050-3	BCF-0050-3	EU525005
Notropis hudsonius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0050-2	BCF-0050-2	EU525006
Notropis percobromus	Canada: Manitoba: Winnipeg River	tissue UOG:Bio:BCF-0840-1	BCF-0840-1	EU524177
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-9	BCF-0521-9	EU525007
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-7	BCF-0521-7	EU525008
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-6	BCF-0521-6	EU525009
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-5	BCF-0521-5	EU525010
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-4	BCF-0521-4	EU525011
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-3	BCF-0521-3	EU525012
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-2	BCF-0521-2	EU525013
Notropis photogenis	Canada: Ontario: Bronte Creek	morphological ROM:Ich:BCF-0521-1	BCF-0521-1	EU525014
Notropis photogenis	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0386-1	BCF-0386-1	EU525015
Notropis rubellus	Canada: Quebec: Batiscan River	morphological ROM:Ich:BCF-0069-1	BCF-0069-1	EU524178

Notropis rubellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0387-4 BCF-0387-4	EU525016
Notropis rubellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0387-3 BCF-0387-3	EU525017
Notropis rubellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0387-2 BCF-0387-2	EU525018
Notropis rubellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0387-1 BCF-0387-1	EU525019
Notropis rubellus	Canada: Quebec: Batiscan River	morphological ROM:Ich:BCF-0069-2 BCF-0069-2	EU525020
Notropis rubellus	Canada: Quebec: Batiscan River	morphological ROM:Ich:BCF-0069-13 BCF-0069-13	EU525021
Notropis rubellus	Canada: Quebec: Batiscan River	morphological ROM:Ich:BCF-0069-10 BCF-0069-10	EU525022
Notropis stramineus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0072-1 BCF-0072-1	EU524179
Notropis stramineus	Canada: Quebec: Lac Saint-Pierre, pointe Yamachiche	morphological ROM:Ich:BCF-0252-1 BCF-0252-1	EU524180
Notropis stramineus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0071-1 BCF-0071-1	EU524181
Notropis stramineus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0071-2 BCF-0071-2	EU525023
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-7 BCF-0361-7	EU525024
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-6 BCF-0361-6	EU525025
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-5 BCF-0361-5	EU525026
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-4 BCF-0361-4	EU525027
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-3 BCF-0361-3	EU525028
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-2 BCF-0361-2	EU525029
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-10 BCF-0361-10	EU525030
Notropis stramineus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0361-1 BCF-0361-1	EU525031
Notropis texanus	Canada: Manitoba: Winnipeg River, Seven sisters	tissue UOG:Bio:BCF-0857-1 BCF-0857-1	EU524182
Notropis volucellus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0417-4 BCF-0417-4	EU524183
Notropis volucellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0388-4 BCF-0388-4	EU524184
Notropis volucellus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0417-3 BCF-0417-3	EU525032
Notropis volucellus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0417-2 BCF-0417-2	EU525033
Notropis volucellus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0417-1 BCF-0417-1	EU525034
Notropis volucellus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0388-6 BCF-0388-6	EU525035
Notropis volucellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0388-3 BCF-0388-3	EU525036
Notropis volucellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0388-2 BCF-0388-2	EU525037
Notropis volucellus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0388-1 BCF-0388-1	EU525038
Phoxinus eos	Canada: Ontario: Wetland 1	morphological ROM:Ich:BCF-0465-1 BCF-0465-1	EU525058
Phoxinus eos	Canada: Ontario: Wetland 6	morphological ROM:Ich:BCF-0459-1 BCF-0459-1	EU525059
Phoxinus eos	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0073-13 BCF-0073-13	EU525060
Phoxinus eos	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0073-12 BCF-0073-12	EU525061
Phoxinus eos	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0073-11 BCF-0073-11	EU525062
Phoxinus eos	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0073-10 BCF-0073-10	EU525063
Phoxinus neogaeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0074-1 BCF-0074-1	EU524274
Phoxinus neogaeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0073-1 BCF-0073-1	EU524275
Phoxinus neogaeus	Canada: Ontario: Wetland 1	morphological ROM:Ich:BCF-0562-1 BCF-0562-1	EU525064
Phoxinus neogaeus	Canada: Ontario: Wetland A	morphological ROM:Ich:BCF-0461-3 BCF-0461-3	EU525065
Phoxinus neogaeus	Canada: Ontario: Wetland A	morphological ROM:Ich:BCF-0461-2 BCF-0461-2	EU525066
Phoxinus neogaeus	Canada: Ontario: Wetland A Canada: Quebec: Aylmer, Compte de Pontiac	morphological ROM:Ich:BCF-0461-1 BCF-0461-1 morphological ROM:Ich:BCF-0277-3 BCF-0277-3	EU525067
Phoxinus neogaeus	, ,	1 &	EU525068
Phoxinus neogaeus	Canada: Quebec: Aylmer, Compte de Pontiac Canada: Quebec: Aylmer, Compte de Pontiac	morphological ROM:Ich:BCF-0277-2 BCF-0277-2	EU525069
Phoxinus neogaeus Phoxinus neogaeus	Canada: Quebec: Ayımer, Compte de Pontiac Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0277-1 BCF-0277-1 morphological ROM:Ich:BCF-0074-3 BCF-0074-3	EU525070
~	-		EU525071
Phoxinus neogaeus Phoxinus neogaeus		morphological ROM:Ich:BCF-0074-2 BCF-0074-2 morphological ROM:Ich:BCF-0073-2 BCF-0073-2	EU525072 EU525073
Pimephales notatus		morphological ROM:Ich:BCF-0075-2 BCF-0075-2 morphological ROM:Ich:BCF-0075-1	EU523073 EU524276
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis Canada: Ontario: Grand River	1 6	
Pimephales notatus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0401-3 BCF-0401-3 morphological ROM:Ich:BCF-0401-2 BCF-0401-2	EU525074 EU525075
Pimephales notatus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0401-2 BCF-0401-1 BCF-0401-1	EU525076
Pimephales notatus	Canada: Ontario: Cland Kivei Canada: Ontario: Lk. Huron-McGregor Bay	morphological ROM:Ich:BCF-0401-1 BCF-0401-1 morphological ROM:Ich:BCF-0341-3 BCF-0341-3	EU525070 EU525077
Pimephales notatus	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0216-3 BCF-0216-3	EU525077
Pimephales notatus	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0216-2 BCF-0216-2	EU525078 EU525079
Pimephales notatus Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0202-3 BCF-0202-3	EU323079 EU525080
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0202-2 BCF-0202-2	
Pimephales notatus Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0202-2 BCF-0202-2 morphological ROM:Ich:BCF-0202-1	EU525081 EU525082
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, lac St-Fierre Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0202-1 morphological ROM:Ich:BCF-0075-3 BCF-0075-3	EU525082 EU525083
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0075-2 BCF-0075-2	EU525085 EU525084
Pimephales promelas	Canada: Quebec: Lac Wapizagonke	morphological ROM:Ich:BCF-0073-2 BCF-0073-2 morphological ROM:Ich:BCF-0078-1	EU523084 EU524277
Pimephales promelas	Canada: Ontario: Wetland 1	morphological ROM:Ich:BCF-0472-3 BCF-0472-3	EU525085
Pimephales promelas	Canada: Ontario: Wetland 1	morphological ROM:Ich:BCF-0472-1 BCF-0472-1	EU525086
Pimephales promelas	Canada: Ontario: Wetland E	morphological ROM:Ich:BCF-0462-3 BCF-0462-3	EU525087
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Pimephales promelas Pimephales promelas	Canada: Ontario: Wetland E Canada: Ontario: Wetland E		ROM:Ich:BCF-0462-2 ROM:Ich:BCF-0462-1	BCF-0462-2 BCF-0462-1	EU525088 EU525089
Pimephales promelas				BCF-0295-3	EU525089
Pimephales promelas	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean Canada: Quebec: Fleuve St-Laurent, riviere St-Jean		ROM:Ich:BCF-0295-3 ROM:Ich:BCF-0295-2	BCF-0295-3 BCF-0295-2	EU525090
Pimephales promelas	Canada: Quebec: Etang de Graviere		ROM:Ich:BCF-0295-2	BCF-0265-3	EU525091 EU525092
Pimephales promelas	Canada: Quebec: Etang de Graviere Canada: Quebec: Etang de Graviere	1 0	ROM:Ich:BCF-0265-1	BCF-0265-1	EU525092 EU525093
Pimephales promelas	Canada: Quebec: Etang de Graviere Canada: Quebec: lac Wapizagonke	1 0	ROM:Ich:BCF-0203-1	BCF-0078-3	EU525093
Pimephales promelas	Canada: Quebec: lac Wapizagonke		ROM:Ich:BCF-0078-2	BCF-0078-2	EU525094 EU525095
Ptychocheilus oregonensis	Canada: British Columbia: Summit lake		ROM:Ich:BCF-0704-4	BCF-0704-4	EU524311
Ptychocheilus oregonensis	Canada: British Columbia: Summit lake		ROM:Ich:BCF-0704-3	BCF-0704-3	EU524311
Ptychocheilus oregonensis	Canada: British Columbia: Summit lake		ROM:Ich:BCF-0704-2	BCF-0704-2	EU524313
Ptychocheilus oregonensis	Canada: British Columbia: Summit lake		ROM:Ich:BCF-0704-1	BCF-0704-1	EU524314
Ptychocheilus oregonensis	Canada: British Columbia: Crooked river		ROM:Ich:BCF-0703-4	BCF-0703-4	EU524315
Ptychocheilus oregonensis	Canada: British Columbia: Crooked river		ROM:Ich:BCF-0703-3	BCF-0703-3	EU524316
Ptychocheilus oregonensis	Canada: British Columbia: Crooked river		ROM:Ich:BCF-0703-2	BCF-0703-2	EU524317
Ptychocheilus oregonensis	Canada: British Columbia: Crooked river		ROM:Ich:BCF-0703-1	BCF-0703-1	EU524318
Rhinichthys atratulus	Canada: Quebec: Riviere Becancour	tissue	UOG:Bio:BCF-0079-1	BCF-0079-1	EU524322
Rhinichthys atratulus	Canada: New Brunswick: Mc Quarrie Brook		ROM:Ich:BCF-0585-4	BCF-0585-4	EU525115
Rhinichthys atratulus	Canada: New Brunswick: Mc Quarrie Brook	1 0	ROM:Ich:BCF-0585-3	BCF-0585-3	EU525116
Rhinichthys atratulus	Canada: New Brunswick: Mc Quarrie Brook		ROM:Ich:BCF-0585-2	BCF-0585-2	EU525117
Rhinichthys atratulus	Canada: New Brunswick: Mc Quarrie Brook		ROM:Ich:BCF-0585-1	BCF-0585-1	EU525118
Rhinichthys atratulus	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	tissue	UOG:Bio:BCF-0079-4	BCF-0079-4	EU525119
Rhinichthys atratulus	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	tissue	UOG:Bio:BCF-0079-2	BCF-0079-2	EU525120
Rhinichthys cataractae	Canada: Ontario: Maitland River	morphological	ROM:Ich:BCF-0773-2	BCF-0773-2	EU524323
Rhinichthys cataractae	Canada: Ontario: Maitland River		ROM:Ich:BCF-0773-1	BCF-0773-1	EU524324
Rhinichthys cataractae	Canada: Ontario: Thames river	1 0	ROM:Ich:BCF-0740-2	BCF-0740-2	EU524325
Rhinichthys cataractae	Canada: Ontario: Thames river		ROM:Ich:BCF-0740-1	BCF-0740-1	EU524326
Rhinichthys cataractae	Canada: Quebec: Riviere Sainte-Marguerite		ROM:Ich:BCF-0081-1	BCF-0081-1	EU524327
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Mars	morphological	ROM:Ich:BCF-0263-3	BCF-0263-3	EU525121
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Mars	morphological	ROM:Ich:BCF-0263-2	BCF-0263-2	EU525122
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Mars	morphological	ROM:Ich:BCF-0263-1	BCF-0263-1	EU525123
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological	ROM:Ich:BCF-0082-4	BCF-0082-4	EU525124
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological	ROM:Ich:BCF-0082-3	BCF-0082-3	EU525125
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological	ROM:Ich:BCF-0082-1	BCF-0082-1	EU525126
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological	ROM:Ich:BCF-0081-12	BCF-0081-12	EU525127
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological	ROM:Ich:BCF-0081-11	BCF-0081-11	EU525128
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological	ROM:Ich:BCF-0081-10	BCF-0081-10	EU525129
Rhinichthys cataractae	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	tissue	UOG:Bio:BCF-0079-3	BCF-0079-3	EU525130
Rhinichthys falcatus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0661-5	BCF-0661-5	EU524328
Rhinichthys falcatus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0661-4	BCF-0661-4	EU524329
Rhinichthys falcatus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0661-3	BCF-0661-3	EU524330
Rhinichthys falcatus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0661-2	BCF-0661-2	EU524331
Rhinichthys falcatus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0661-1	BCF-0661-1	EU524332
Rhinichthys obtusus	Canada: Ontario: Sydenham River	morphological	ROM:Ich:BCF-0770-1	BCF-0770-1	EU524333
Rhinichthys obtusus	Canada: Ontario: Credit River	morphological	ROM:Ich:BCF-0619-3	BCF-0619-3	EU524334
Rhinichthys obtusus	Canada: Ontario: Marden Creek		ROM:Ich:BCF-0619-2	BCF-0619-2	EU524335
Rhinichthys obtusus	Canada: Ontario: Humber River		ROM:Ich:BCF-0619-1	BCF-0619-1	EU524336
Rhinichthys obtusus	Canada: Ontario: Humber River		ROM:Ich:BCF-0483-1	BCF-0483-1	EU525131
Rhinichthys obtusus	Canada: Ontario: Credit River		ROM:Ich:BCF-0439-3	BCF-0439-3	EU525132
Rhinichthys obtusus	Canada: Ontario: Marden Creek		ROM:Ich:BCF-0439-2	BCF-0439-2	EU525133
Rhinichthys obtusus	Canada: Ontario: Credit River		ROM:Ich:BCF-0439-1	BCF-0439-1	EU525134
Rhinichthys osculus	Canada: British Columbia: Kettle river	tissue	UOG:Bio:BCF-0666-5	BCF-0666-5	EU524337
Rhinichthys osculus	Canada: British Columbia: Kettle river	tissue	UOG:Bio:BCF-0666-4	BCF-0666-4	EU524338
Rhinichthys osculus	Canada: British Columbia: Kettle river	tissue	UOG:Bio:BCF-0666-3	BCF-0666-3	EU524339
Rhinichthys osculus	Canada: British Columbia: Kettle river	tissue		BCF-0666-2	EU524340
Rhinichthys osculus	Canada: British Columbia: Kettle river	tissue	UOG:Bio:BCF-0666-1	BCF-0666-1	EU524341
Rhinichthys umatilla	Canada: British Columbia: Similkanmeen river	tissue	UOG:Bio:BCF-0662-5	BCF-0662-5	EU524342
Rhinichthys umatilla	Canada: British Columbia: Similkanmeen river	tissue	UOG:Bio:BCF-0662-4	BCF-0662-4	EU524343
Rhinichthys umatilla	Canada: British Columbia: Similkanmeen river	tissue	UOG:Bio:BCF-0662-3	BCF-0662-3	EU524344
Rhinichthys umatilla	Canada: British Columbia: Similkanmeen river	tissue	UOG:Bio:BCF-0662-2	BCF-0662-2	EU524345
Rhinichthys umatilla	Canada: British Columbia: Similkanmeen river	tissue	UOG:Bio:BCF-0662-1	BCF-0662-1	EU524346
Richardsonius balteatus	Canada: British Columbia: Fraser river	tissue		BCF-0685-5	EU524347
Richardsonius balteatus	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0685-3	BCF-0685-3	EU524348

Scardinius erythrophthalmus	Canada: Ontario: Welland river, city of welland	tissue UOG:Bio:BCF-0726-1 BCF-0726-1	EU524381
Scardinius erythrophthalmus	Canada: Quebec: Lac St-Pierre	tissue UOG:Bio:BCF-0494-1 BCF-0494-1	EU525135
Semotilus atromaculatus	Canada: Ontario: Wetland 8	morphological ROM:Ich:BCF-0474-3 BCF-0474-3	EU525136
Semotilus atromaculatus	Canada: Ontario: Wetland 8	morphological ROM:Ich:BCF-0474-2 BCF-0474-2	EU525137
Semotilus atromaculatus	Canada: Ontario: Wetland 8	morphological ROM:Ich:BCF-0474-1 BCF-0474-1	EU525138
Semotilus atromaculatus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0412-1 BCF-0412-1	EU525139
Semotilus atromaculatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0290-3 BCF-0290-3	EU525140
Semotilus atromaculatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0290-2 BCF-0290-2	EU525141
Semotilus atromaculatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Charles	morphological ROM:Ich:BCF-0229-3 BCF-0229-3	EU525142
Semotilus atromaculatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Charles	morphological ROM:Ich:BCF-0229-2 BCF-0229-2	EU525143
Semotilus atromaculatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Charles	morphological ROM:Ich:BCF-0229-1 BCF-0229-1	EU525144
Semotilus corporalis	Canada: Quebec: Riviere Sainte-Marguerite	morphological ROM:Ich:BCF-0254-1 BCF-0254-1	EU524382
Semotilus corporalis	Canada: Quebec: Riviere Becancour	morphological ROM:Ich:BCF-0086-1 BCF-0086-1	EU524383
Semotilus corporalis	Canada: Ontario: York River	morphological ROM:Ich:BCF-0528-3 BCF-0528-3	EU525145
Semotilus corporalis	Canada: Ontario: York River	morphological ROM:Ich:BCF-0528-2 BCF-0528-2	EU525146
Semotilus corporalis	Canada: Ontario: York River	morphological ROM:Ich:BCF-0528-1 BCF-0528-1	EU525147
Semotilus corporalis	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0088-2 BCF-0088-2	EU525148
Semotilus corporalis	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0088-1 BCF-0088-1	EU525149
Semotilus corporalis	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0086-4 BCF-0086-4	EU525150
Semotilus corporalis	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0086-3 BCF-0086-3	EU525151
Semotilus corporalis Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Becancour Canada: Quebec: Riviere Richelieu	morphological ROM:Ich:BCF-0086-2 BCF-0086-2 tissue UOG:Bio:BCF-0238-1 BCF-0238-1	EU525152
Tinca tinca Tinca tinca		tissue UOG:Bio:BCF-0238-1 BCF-0238-19	EU524390
Tinca tinca Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-19 BCF-0238-19	EU525153 EU525154
Tinca tinca Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-17 BCF-0238-17	EU525154 EU525155
Tinca tinca Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-16 BCF-0238-16	EU525156
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-15 BCF-0238-15	EU525157
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-14 BCF-0238-14	EU525157
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-13 BCF-0238-13	EU525159
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-11 BCF-0238-11	EU525160
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-10 BCF-0238-10	EU525161
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0238-12 BCF-0238-12	EU525162
Esox americanus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0045-1 BCF-0045-1	EU524009
Esox americanus	Canada: Ontario: Twenty Mile Creek	morphological ROM:Ich:BCF-0452-1 BCF-0452-1	EU524568
Esox americanus	Canada: Quebec: Richelieu River	morphological ROM:Ich:BCF-0449-3 BCF-0449-3	EU524569
Esox americanus	Canada: Quebec: Richelieu River	morphological ROM:Ich:BCF-0449-2 BCF-0449-2	EU524570
Esox americanus	Canada: Quebec: Richelieu River	morphological ROM:Ich:BCF-0449-1 BCF-0449-1	EU524571
Esox americanus	Canada: Ontario: Tea Creek	morphological ROM:Ich:BCF-0430-2 BCF-0430-2	EU524572
Esox americanus	Canada: Ontario: Tea Creek	morphological ROM:Ich:BCF-0430-1 BCF-0430-1	EU524573
Esox americanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0046-3 BCF-0046-3	EU524574
Esox americanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0046-2 BCF-0046-2	EU524575
Esox americanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0046-1 BCF-0046-1	EU524576
Esox americanus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0045-2 BCF-0045-2	EU524577
Esox lucius	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0041-1 BCF-0041-1	EU524010
Esox lucius	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0457-2 BCF-0457-2	EU524578
Esox lucius	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0457-1 BCF-0457-1	EU524579
Esox lucius	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0455-2 BCF-0455-2	EU524580
Esox lucius	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0455-1 BCF-0455-1	EU524581
Esox lucius	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0294-3 BCF-0294-3	EU524582
Esox lucius	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0294-2 BCF-0294-2	EU524583
Esox lucius	Canada: Quebec: Riviere Gatineau	morphological ROM:Ich:BCF-0280-3 BCF-0280-3	EU524584
Esox lucius	Canada: Quebec: Riviere Gatineau	morphological ROM:Ich:BCF-0280-2 BCF-0280-2	EU524585
Esox lucius	Canada: Quebec: Riviere Gatineau	morphological ROM:Ich:BCF-0280-1 BCF-0280-1	EU524586
Esox lucius	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0218-3 BCF-0218-3	EU524587
Esox lucius	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0218-2 BCF-0218-2	EU524588
Esox lucius	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0218-1 BCF-0218-1	EU524589
Esox lucius	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0040-3 BCF-0040-3	EU524590
Esox lucius	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0040-2 BCF-0040-2	EU524591
Esox lucius	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0040-1 BCF-0040-1	EU524592
Esox masquinongy	Canada: Quebec: Riviere a la truite	morphological ROM:Ich:BCF-0038-1 BCF-0038-1	EU524011
Esox masquinongy	Canada: Ontario: Muskie Lake	morphological ROM:Ich:BCF-0448-2 BCF-0448-2	EU524593
Esox masquinongy Esox masquinongy	Canada: Ontario: Stony Lake Canada: Ontario: Muskie Lake	morphological ROM:Ich:BCF-0448-10 BCF-0448-10 morphological ROM:Ich:BCF-0448-1 BCF-0448-1	EU524594 EU524595
Look masquinongy	Canada, Ontano, muskie Lake	morphological ROM:Ich:BCF-0448-1 BCF-0448-1	E0324393

Esox masquinongy	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	1 6	EU524596
Esox masquinongy	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	1 6	EU524597
Esox masquinongy	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	1 2	EU524598
Esox masquinongy	Canada: Ontario: Georgian Bay	1 6	EU524599
Esox masquinongy	Canada: Ontario: Stony Lake	1 &	EU524600
Esox masquinongy	Canada: Ontario: Pigeon Lake	1 6	EU524601
Esox masquinongy	Canada: Ontario: Chemong Lake	1 0	EU524602
Esox niger	Canada: Quebec: Lac Stoke	1 6	EU524012
Esox niger	Canada: New Brunswick: Belleisle Bay	tissue UOG:Bio:BCF-0580-4 BCF-0580-4	EU524603
Esox niger	Canada: New Brunswick: Belleisle Bay	tissue UOG:Bio:BCF-0580-3 BCF-0580-3	EU524604
Esox niger	Canada: New Brunswick: Belleisle Bay	tissue UOG:Bio:BCF-0580-2 BCF-0580-2	EU524605
Esox niger	Canada: New Brunswick: Belleisle Bay	tissue UOG:Bio:BCF-0580-1 BCF-0580-1	EU524606
Esox niger	Canada: Quebec: Ruisseau Noir	morphological ROM:Ich:BCF-0485-13 BCF-0485-13	EU524607
Esox niger	Canada: Quebec: Ruisseau Noir	morphological ROM:Ich:BCF-0485-12 BCF-0485-12	EU524608
Esox niger	Canada: Quebec: Ruisseau Noir	morphological ROM:Ich:BCF-0485-11 BCF-0485-11	EU524609
Esox niger	Canada: Quebec: Ruisseau Noir	morphological ROM:Ich:BCF-0485-10 BCF-0485-10	EU524610
Esox niger	Canada: Quebec: Ruisseau Noir	morphological ROM:Ich:BCF-0485-1 BCF-0485-1	EU524611
Esox niger	Canada: Quebec: lac Stoke	morphological ROM:Ich:BCF-0199-2 BCF-0199-2	EU524612
Fundulus diaphanus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0221-1 BCF-0221-1	EU524058
Fundulus diaphanus	Canada: Nova Scotia: Little Mushamush lake	morphological ROM:Ich:BCF-0589-3 BCF-0589-3	EU524617
Fundulus diaphanus	Canada: Nova Scotia: Little Mushamush lake	morphological ROM:Ich:BCF-0589-2 BCF-0589-2	EU524618
Fundulus diaphanus	Canada: Nova Scotia: Little Mushamush lake		EU524619
Fundulus diaphanus	Canada: Ontario: Fleuve St-Laurent		EU524620
Fundulus diaphanus	Canada: Ontario: Fleuve St-Laurent		EU524621
Fundulus diaphanus	Canada: Ontario: Lac Opinicon	1 2	EU524622
Fundulus diaphanus	Canada: Ontario: Lac Opinicon		EU524623
Fundulus diaphanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre		EU524624
Fundulus diaphanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre		EU524625
Fundulus diaphanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre		EU524626
Fundulus heteroclitus	Canada: Nova Scotia: La Have river		EU524627
Fundulus heteroclitus	Canada: Nova Scotia: La Have river		EU524628
Fundulus heteroclitus	Canada: Nova Scotia: La Have river		EU524629
Fundulus heteroclitus	Canada: Nova Scotia: La Have river		EU524630
Fundulus notatus			
	Canada: Ontario: Sydenham River, Black creek	1 &	EU524059
Fundulus notatus Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	1 6	EU524060
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek Canada: Ontario: Sydenham River, Black creek	1 2	EU524061
		1 0	EU524062
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	1 0	EU524063
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	1 6	EU524064
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	1 &	EU524065
Microgadus tomcod	Canada: Quebec: Saint Laurent River	1 6	EU524129
Microgadus tomcod	United States: Kansas:		EU524130
Apeltes quadracus	Canada: Quebec: Trois-Pistol, Saint-Laurent		EU523919
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	1 6	EU524443
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	1 6	EU524444
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	1 &	EU524445
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	1 0	EU524446
Culaea inconstans	Canada: Quebec: Riviere Cap-Rouge		EU524003
Culaea inconstans	Canada: Ontario: Wanapitei River	1 0	EU524532
Culaea inconstans	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0436-1 BCF-0436-1	EU524533
Culaea inconstans	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	1 6	EU524534
Culaea inconstans	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0204-3 BCF-0204-3	EU524535
Culaea inconstans	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0204-2 BCF-0204-2	EU524536
Culaea inconstans	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	tissue UOG:Bio:BCF-0133-3 BCF-0133-3	EU524537
Culaea inconstans	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	tissue UOG:Bio:BCF-0133-1 BCF-0133-1	EU524538
Gasterosteus aculeatus	Canada: Quebec: Riviere Trinite	morphological ROM:Ich:BCF-0224-1 BCF-0224-1	EU524066
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0135-5 BCF-0135-5	EU524631
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0135-4 BCF-0135-4	EU524632
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0135-3 BCF-0135-3	EU524633
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge		EU524634
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge		EU524635
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie		EU524636
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie		EU524637
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Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0134-2	
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0134-1	BCF-0134-1 EU524639
Gasterosteus wheatlandi Gasterosteus wheatlandi	Canada: Quebec: Ile Verte, Saint-Laurent	morphological ROM:Ich:BCF-0136-1	BCF-0136-1 EU524067 BCF-0136-5 EU524640
Gasterosteus wheatlandi	Canada: Quebec: Fleuve St-Laurent, Ile Verte Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0136-5	
		morphological ROM:Ich:BCF-0136-3 morphological ROM:Ich:BCF-0136-2	BCF-0136-3 EU524641 BCF-0136-2 EU524642
Gasterosteus wheatlandi	Canada: Quebec: Fleuve St-Laurent, Ile Verte Canada: British Columbia: Baffin island	1 0	
Pungitius pungitius		tissue UOG:Bio:BCF-0677-3	BCF-0677-3 EU524319
Pungitius pungitius	Canada: British Columbia: Baffin island	tissue UOG:Bio:BCF-0677-2	BCF-0677-2 EU524320
Pungitius pungitius	Canada: Quebec: Ile Verte, Saint-Laurent	morphological ROM:Ich:BCF-0137-1	BCF-0137-1 EU524321
Pungitius pungitius	Canada: Ontario: Lk. Superior-Whitefish Bay	morphological ROM:Ich:BCF-0340-2	BCF-0340-2 EU525105
Pungitius pungitius	Canada: Ontario: Lk. Huron-Meldrum Bay	morphological ROM:Ich:BCF-0335-1	BCF-0335-1 EU525106
Pungitius pungitius	Canada: Ontario: Lk. Superior-Whitefish Bay Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological ROM:Ish:BCF-0334-1	BCF-0334-1 EU525107
Pungitius pungitius Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, Inviere Ste-Iviai guerne Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0138-1 morphological ROM:Ich:BCF-0137-5	BCF-0138-1 EU525108 BCF-0137-5 EU525109
Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, He Verte Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0137-4	BCF-0137-4 EU525110
Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, He Verte	morphological ROM:Ich:BCF-0137-3	BCF-0137-4 EU525111
Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, He Verte Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0137-2	BCF-0137-2 EU525112
Neogobius melanostomus	Canada: Ontario: Georgian bay	morphological ROM:Ich:BCF-0775-2	BCF-0775-2 EU524154
Neogobius melanostomus	Canada: Ontario: Georgian bay Canada: Ontario: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-07/5-2	BCF-0761-1 EU524155
Neogobius melanostomus	Canada: Quebec: Fleuve Saint-Laurent	morphological ROM:Ich:BCF-0701-1	BCF-0196-1 EU524156
Neogobius melanostomus	Canada: Ontario: Sixteen Mile Creek	tissue UOG:Bio:BCF-0534-1	BCF-0534-1 EU524919
Neogobius melanostomus	Canada: Quebec: Fleuve St-Laurent,	tissue UOG:Bio:BCF-0196-2	
Proterorhinus marmoratus	Canada: Ontario: Rose Beach, Lac Erie	tissue UOG:Bio:BCF-0815-5	BCF-0815-5 EU524305
Proterorhinus marmoratus	Canada: Ontario: Rose Beach, Eac Effe Canada: Ontario: Saint Clair lake, Mitchell Bay	morphological ROM:Ich:BCF-0766-1	BCF-0766-1 EU524306
Proterorhinus marmoratus	Canada: Ontario: Saint Clair lake, Mitchell Bay	morphological ROM:Ich:BCF-0765-2	BCF-0765-2 EU524307
Proterorhinus marmoratus	Canada: Ontario: Samt Clair take, Michell Bay Canada: Ontario: Rose Beach, Lac Erie	tissue UOG:Bio:BCF-0815-3	BCF-0815-3 EU524308
Proterorhinus marmoratus	Canada: Ontario: Rose Beach, Lac Erie	tissue UOG:Bio:BCF-0815-2	BCF-0815-2 EU524309
Proterorhinus marmoratus	Canada: Ontario: Rose Beach, Lac Erie	tissue UOG:Bio:BCF-0815-1	BCF-0815-1 EU524310
Hiodon alosoides	Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0321-4	BCF-0321-4 EU524646
Hiodon alosoides	Canada: Manitoba: Lac Winnipeg Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0321-2	BCF-0321-2 EU524647
Hiodon alosoides	Canada: Quebec: Lac Lamotte	tissue UOG:Bio:BCF-0022-4	BCF-0022-4 EU524648
Hiodon alosoides	Canada: Quebec: Lac Lamotte	tissue UOG:Bio:BCF-0022-3	BCF-0022-3 EU524649
Hiodon alosoides	Canada: Quebec: Lac Lamotte	tissue UOG:Bio:BCF-0022-2	BCF-0022-2 EU524650
Hiodon alosoides	Canada: Quebec: Lac Lamotte	tissue UOG:Bio:BCF-0022-1	BCF-0022-1 EU524651
Hiodon tergisus	Canada: Quebec: Saint Lawrence River St-Nicolas	tissue UOG:Bio:BCF-0019-1	BCF-0019-1 EU524068
Hiodon tergisus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0381-2	BCF-0381-2 EU524652
Hiodon tergisus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0381-1	BCF-0381-1 EU524653
Hiodon tergisus	Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0323-3	BCF-0323-3 EU524654
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	tissue UOG:Bio:BCF-0021-3	BCF-0021-3 EU524655
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	tissue UOG:Bio:BCF-0021-2	
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis		BCF-0021-1 EU524657
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0020-3	BCF-0020-3 EU524658
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0020-2	BCF-0020-2 EU524659
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0020-1	BCF-0020-1 EU524660
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0019-2	BCF-0019-2 EU524661
Ameiurus melas	Canada: Ontario: Maitland River	tissue UOG:Bio:BCF-0774-1	BCF-0774-1 EU523905
Ameiurus melas	Canada: Ontario: Saint Clair River, Talford creek	morphological ROM:Ich:BCF-0759-1	BCF-0759-1 EU523906
Ameiurus melas	Canada: British Columbia: Osoyoos lake	morphological ROM:Ich:BCF-0701-1	BCF-0701-1 EU523907
Ameiurus melas	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0424-5	BCF-0424-5 EU524415
Ameiurus melas	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0424-4	BCF-0424-4 EU524416
Ameiurus melas	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0424-3	BCF-0424-3 EU524417
Ameiurus melas	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0424-2	BCF-0424-2 EU524418
Ameiurus melas	Canada: Ontario: Lake Ontario	morphological ROM:Ich:BCF-0424-1	BCF-0424-1 EU524419
Ameiurus natalis	Canada: Ontario: Sydenham River, Bear creek	morphological ROM:Ich:BCF-0777-1	BCF-0777-1 EU523908
Ameiurus natalis	Canada: Ontario: Tumblesons Pond	morphological ROM:Ich:BCF-0487-6	BCF-0487-6 EU524420
Ameiurus natalis	Canada: Ontario: Tumblesons Pond	morphological ROM:Ich:BCF-0487-5	BCF-0487-5 EU524421
Ameiurus natalis	Canada: Ontario: Tumblesons Pond	morphological ROM:Ich:BCF-0487-4	BCF-0487-4 EU524422
Ameiurus natalis	Canada: Ontario: Tumblesons Pond	morphological ROM:Ich:BCF-0487-3	BCF-0487-3 EU524423
Ameiurus natalis	Canada: Ontario: Tumblesons Pond	morphological ROM:Ich:BCF-0487-2	BCF-0487-2 EU524424
Ameiurus natalis	Canada: Ontario: Tumblesons Pond	morphological ROM:Ich:BCF-0487-1	BCF-0487-1 EU524425
Ameiurus nebulosus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0117-1	BCF-0117-1 EU523909
Ameiurus nebulosus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0121-3	BCF-0121-3 EU524426
Ameiurus nebulosus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0121-2	BCF-0121-2 EU524427

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Ameiurus nebulosus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0121-1	
Ameiurus nebulosus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0118-3	BCF-0118-3 EU524429
Ameiurus nebulosus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0118-2	BCF-0118-2 EU524430
Ameiurus nebulosus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0118-1	BCF-0118-1 EU524431
Ameiurus nebulosus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0117-3	BCF-0117-3 EU524432
Ameiurus nebulosus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0117-2	BCF-0117-2 EU524433
Ictalurus punctatus	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0113-1	BCF-0113-1 EU524106
Ictalurus punctatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological ROM:Ich:BCF-0114-3	BCF-0114-3 EU524676
Ictalurus punctatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological ROM:Ich:BCF-0114-2	BCF-0114-2 EU524677
Ictalurus punctatus	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological ROM:Ich:BCF-0114-1	BCF-0114-1 EU524678
Ictalurus punctatus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0501-2	BCF-0501-2 EU524679
Ictalurus punctatus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0501-1	BCF-0501-1 EU524680
Ictalurus punctatus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0394-3	BCF-0394-3 EU524681
Ictalurus punctatus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0394-2	BCF-0394-2 EU524682
Ictalurus punctatus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0394-1	BCF-0394-1 EU524683
Ictalurus punctatus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0115-3	BCF-0115-3 EU524684
Ictalurus punctatus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0115-2	BCF-0115-2 EU524685
Ictalurus punctatus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0115-1	BCF-0115-1 EU524686
Noturus flavus	Canada: Ontario: Humber River	morphological ROM:Ich:BCF-0481-1	BCF-0481-1 EU525039
Noturus flavus	Canada: Ontario: Fansher Creek	morphological ROM:Ich:BCF-0418-2	BCF-0418-2 EU525040
Noturus flavus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0418-1	BCF-0418-1 EU525041
Noturus flavus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0374-1	BCF-0374-1 EU525042
Noturus gyrinus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0123-1	BCF-0123-1 EU524185
Noturus gyrinus	Canada: Ontario: Long Point NWA	morphological ROM:Ich:BCF-0372-3	BCF-0372-3 EU525043
Noturus gyrinus	Canada: Ontario: Long Point NWA	morphological ROM:Ich:BCF-0372-2	BCF-0372-2 EU525044
Noturus gyrinus	Canada: Ontario: Long Point NWA	morphological ROM:Ich:BCF-0372-1	BCF-0372-1 EU525045
Noturus gyrinus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0124-3	BCF-0124-3 EU525046
Noturus gyrinus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0124-2	BCF-0124-2 EU525047
Noturus gyrinus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0124-1	BCF-0124-1 EU525048
Noturus gyrinus	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-0123-2	BCF-0123-2 EU525049
Noturus gyrinus	Canada: Ontario: Twenty Mile Creek	morphological ROM:Ich:BCF-0464-1	BCF-0464-1 EU525050
Noturus gyrinus	Canada: Ontario: Twenty Mile Creek	morphological ROM:Ich:BCF-0453-2	BCF-0453-2 EU525051
••	•		BCF-0453-1 EU525052
Noturus gyrinus	Canada: Ontario: Twenty Mile Creek	morphological ROM:Ich:BCF-0453-1	
Noturus insignis	Canada: Ontario: Mississippi river	tissue UOG:Bio:BCF-0732-8	BCF-0732-8 EU524186
Noturus insignis	Canada: Ontario: Mississippi river	tissue UOG:Bio:BCF-0732-6	BCF-0732-6 EU524187
Noturus insignis	Canada: Ontario: Mississippi river	tissue UOG:Bio:BCF-0732-4	BCF-0732-4 EU524188
Noturus insignis	Canada: Ontario: Mississippi river	tissue UOG:Bio:BCF-0732-3	BCF-0732-3 EU524189
Noturus miurus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0419-1	BCF-0419-1 EU525053
Noturus stigmosus	Canada: Ontario: Detroit River	morphological ROM:Ich:BCF-0493-2	BCF-0493-2 EU525054
Noturus stigmosus	Canada: Ontario: Detroit River	morphological ROM:Ich:BCF-0493-1	BCF-0493-1 EU525055
Pylodictis olivaris	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0547-2	BCF-0547-2 EU525113
Pylodictis olivaris	Canada: Ontario: Lake St Clair	morphological ROM:Ich:BCF-0547-1	BCF-0547-1 EU525114
Lepisosteus oculatus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0447-1	BCF-0447-1 EU524699
Lepisosteus osseus	Canada: Ontario: Lake Simcoe	morphological ROM:Ich:BCF-0541-2	BCF-0541-2 EU524119
Lepisosteus osseus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0012-2	BCF-0012-2 EU524120
Lepisosteus osseus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0012-1	BCF-0012-1 EU524121
Lepisosteus osseus	Canada: Quebec: Riviere Richelieu, Saint-Ours	tissue UOG:Bio:BCF-0011-1	BCF-0011-1 EU524122
Lota lota	Canada: Quebec: Saint-Nicolas, Fleuve Saint-Laurent	tissue UOG:Bio:BCF-0272-1	BCF-0272-1 EU524125
Lota lota	Canada: New Brunswick: Digdegaush lake	morphological ROM:Ich:BCF-0575-3	BCF-0575-3 EU524746
Lota lota	Canada: New Brunswick: Digdegaush lake	morphological ROM:Ich:BCF-0575-2	BCF-0575-2 EU524747
Lota lota	Canada: New Brunswick: Digdegaush lake	morphological ROM:Ich:BCF-0575-1	BCF-0575-1 EU524748
Lota lota	Canada: Quebec: Lac Duparquet	tissue UOG:Bio:BCF-0564-4	BCF-0564-4 EU524749
Lota lota	Canada: Quebec: Lac Duparquet	tissue UOG:Bio:BCF-0564-3	BCF-0564-3 EU524750
Lota lota	Canada: Quebec: Lac Duparquet	tissue UOG:Bio:BCF-0564-2	BCF-0564-2 EU524751
Lota lota	Canada: Quebec: Lac Duparquet	tissue UOG:Bio:BCF-0564-1	BCF-0564-1 EU524752
Lota lota	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0515-4	BCF-0515-4 EU524753
Lota lota	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0515-3	BCF-0515-3 EU524754
Lota lota	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0515-2	BCF-0515-2 EU524755
Lota lota	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0515-1	BCF-0515-1 EU524756
Lota lota	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0128-1	BCF-0128-1 EU524757
Osmerus mordax	Canada: Ontario: Unknown Creek	morphological ROM:Ich:BCF-0454-4	BCF-0454-4 EU524235
Osmerus mordax	Canada: Ontario: Unknown Creek	morphological ROM:Ich:BCF-0454-2	BCF-0454-2 EU524236
Osmerus mordax	Canada: Ontario: Unknown Creek	morphological ROM:Ich:BCF-0454-1	BCF-0454-1 EU524237

Spirinchus thaleichthys	Canada: British Columbia: Fraser river		524384
Spirinchus thaleichthys	Canada: British Columbia: Fraser river		524385
Thaleichthys pacificus	Canada: British Columbia: Vancouver island		524386
Thaleichthys pacificus	Canada: British Columbia: Vancouver island		524387
Thaleichthys pacificus	Canada: British Columbia: Vancouver island		524388
Thaleichthys pacificus	United States: Washington: Columbia river		524389
Morone americana	Canada: Ontario: Lake Erie	1 6	524133
Morone americana	Canada: Ontario: Lake Erie	1 8	524134
Morone americana	Canada: Ontario: Lake Erie		524135
Morone americana	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu		524136
Morone americana	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu		524137
Morone americana	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas		524138
Morone americana	Canada: Quebec: Saint Lawrence River St-Nicolas		524139
Morone chrysops	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0504-3 BCF-0504-3 EU5	524140
Morone chrysops	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0504-2 BCF-0504-2 EU5	524141
Morone chrysops	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0504-1 BCF-0504-1 EU5	524142
Morone saxatilis	Canada: Quebec: Pisciculture de Baldwin	tissue UOG:Bio:BCF-0149-7 BCF-0149-7 EU5	524143
Morone saxatilis	Canada: Quebec: Pisciculture de Baldwin	tissue UOG:Bio:BCF-0149-6 BCF-0149-6 EU5	524144
Morone saxatilis	Canada: Quebec: Pisciculture de Baldwin	tissue UOG:Bio:BCF-0149-5 BCF-0149-5 EU5	524145
Ammocrypta pellucida	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-6 BCF-0391-6 EU5	523911
Ammocrypta pellucida	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-5 BCF-0391-5 EU5	523912
Ammocrypta pellucida	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-4 BCF-0391-4 EU5	523913
Ammocrypta pellucida	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-2 BCF-0391-2 EU5	523914
Ammocrypta pellucida	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-1 BCF-0391-1 EU5	523915
Ammocrypta pellucida	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0182-2 BCF-0182-2 EU5	523916
Ammocrypta pellucida	Canada: Quebec: Lac Saint-Pierre, Pointe Yamachiche	morphological ROM:Ich:BCF-0182-1 BCF-0182-1 EU5	523917
Etheostoma blennioides	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0769-1 BCF-0769-1 EU5	524013
Etheostoma blennioides	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-6 BCF-0392-6 EU5	524014
Etheostoma blennioides	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-5 BCF-0392-5 EU5	524015
Etheostoma blennioides	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-4 BCF-0392-4 EU5	524016
Etheostoma blennioides	Canada: Ontario: Grand River		524017
Etheostoma blennioides	Canada: Ontario: Grand River		524018
Etheostoma blennioides	Canada: Ontario: Grand River	. •	524019
Etheostoma caeruleum	Canada: Ontario: Maitland River	1 8	524020
Etheostoma caeruleum	Canada: Ontario: Maitland River		524021
Etheostoma caeruleum	Canada: Ontario: Sauble River, Georgian Bay		524022
Etheostoma caeruleum	Canada: Ontario: Sauble River, Georgian Bay	. •	524023
Etheostoma exile	Canada: Ontario: Wanapitei River		524024
Etheostoma exile	Canada: Ontario: Wanapitei River	. •	524025
Etheostoma exile	Canada: Ontario: Credit River		524026
Etheostoma exile	Canada: Ontario: Credit River		524027
Etheostoma exile	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	. •	524028
Etheostoma exile	Canada: Quebec: Fleuve St Laurent, lac St Louis		524029
Etheostoma exile	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)		524030
Etheostoma flabellare	Canada: Ontario: Maitland River	. •	524031
Etheostoma flabellare	Canada: Ontario: Maitland River		524031
Etheostoma flabellare	Canada: Ontario: Maitland River		524033
Etheostoma flabellare	Canada: Ontario: Maitland River		524034
Etheostoma flabellare	Canada: Quebec: Fleuve St-Laurent, riviere du Sud		
		. •	524035
Etheostoma flabellare	Canada: Quebec: Fleuve St-Laurent, riviere du Sud		524036
Etheostoma flabellare	Canada: Quebec: Fleuve St-Laurent, riviere du Sud Canada: Quebec: Riviere du Sud		524037
Etheostoma flabellare	•		524038
Etheostoma microperca	Canada: Ontario: Miller Lake, Georgian Bay	1 6	524039
Etheostoma microperca	Canada: Ontario: Miller Lake, Georgian Bay	1 6	524040
Etheostoma microperca	Canada: Ontario: Miller Lake, Georgian Bay	. •	524041
Etheostoma microperca	Canada: Ontario: Miller Lake, Georgian Bay	1 6	524042
Etheostoma microperca	Canada: Ontario: Miller Lake, Georgian Bay		524043
Etheostoma microperca	Canada: Ontario: Miller Lake, Georgian Bay	1 6	524044
Etheostoma nigrum	Canada: Ontario: Thames River	1 6	524045
Etheostoma nigrum	Canada: Ontario: Thames River	1 6	524046
Etheostoma nigrum	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean		524047
Etheostoma nigrum	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	. •	524048
Etheostoma nigrum	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological ROM:Ich:BCF-0242-3 BCF-0242-3 EU5	524049

Etheostoma nigrum	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological ROM:Ich:BCF-0242-2 BCF-0242	-2 EU524050
Etheostoma olmstedi	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0245-3 BCF-0245	-3 EU524051
Etheostoma olmstedi	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0245-2 BCF-0245	-2 EU524052
Etheostoma olmstedi	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0245-1 BCF-0245	-1 EU524053
Etheostoma olmstedi	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0244-2 BCF-0244	-2 EU524054
Etheostoma olmstedi	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0244-1 BCF-0244	-1 EU524055
Etheostoma olmstedi	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0180-3 BCF-0180	-3 EU524056
Gymnocephalus cernuus	United States: : St. Louis River Estuary	tissue UOG:Bio:FFC71 FFC71	EU524643
Gymnocephalus cernuus	United States: : St. Louis River Estuary	tissue UOG:Bio:FFC74 FFC74	EU524644
Gymnocephalus cernuus	United States: : St. Louis River Estuary	tissue UOG:Bio:FFC90 FFC90	EU524645
Perca flavescens	Canada: British Columbia: Charlie lake, Fort Saint-John	tissue UOG:Bio:BCF-0686-3 BCF-0686	-3 EU524238
Perca flavescens	Canada: New Brunswick: Gapetown	tissue UOG:Bio:BCF-0578-2 BCF-0578	-2 EU524239
Perca flavescens	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0214-3 BCF-0214	-3 EU524240
Perca flavescens	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0214-2 BCF-0214	-2 EU524241
Perca flavescens	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0214-1 BCF-0214	-1 EU524242
Perca flavescens	Canada: Quebec: Baie Missisquoi	morphological ROM:Ich:BCF-0188-3 BCF-0188	-3 EU524243
Perca flavescens	Canada: Quebec: Baie Missisquoi	morphological ROM:Ich:BCF-0188-2 BCF-0188	-2 EU524244
Perca flavescens	Canada: Quebec: Baie Missisquoi	morphological ROM:Ich:BCF-0188-1 BCF-0188	-1 EU524245
Percina caprodes	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0446-12 BCF-0446	
Percina caprodes	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0373-5 BCF-0373	
Percina caprodes	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0373-4 BCF-0373	
Percina caprodes	Canada: Quebec: Riviere Batiscan	morphological ROM:Ich:BCF-0205-1 BCF-0205	
Percina copelandi	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0241-3 BCF-0241	
Percina copelandi	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0241-2 BCF-0241	
Percina copelandi	Canada: Quebec: Riviere Becancour	morphological ROM:Ich:BCF-0241-1 BCF-0241	
Percina maculata	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0411-1 BCF-0411	
Percina maculata	Canada: Ontario: Talford creek, Saint Clair River	morphological ROM:Ich:BCF-0768-1 BCF-0768	
Percina maculata	Canada: Ontario: Sydenham River (East)	tissue UOG:Bio:BCF-0509-2 BCF-0509	
Percina maculata	Canada: Ontario: Sydenham River (East)	tissue UOG:Bio:BCF-0509-1 BCF-0509	
Percina maculata	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0370-3 BCF-0370	
Percina maculata	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0370-2 BCF-0370	
Percina maculata	Canada: Ontario: Thames River	. •	
Percina macuiata Percina shumardi	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0370-1 BCF-0370 morphological ROM:Ich:BCF-0618-1 BCF-0618	
Sander canadensis Sander canadensis	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0318-4 BCF-0318	
	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0318-3 BCF-0318	
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0318-2 BCF-0318	
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0190-4 BCF-0190	
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0190-3 BCF-0190	
Sander canadensis	Canada: Quebec: Saint Lawrence River St-Nicolas	tissue UOG:Bio:BCF-0190-1 BCF-0190	
Sander vitreus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0428-4 BCF-0428	
Sander vitreus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0428-2 BCF-0428	
Sander vitreus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0428-1 BCF-0428	
Sander vitreus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0192-4 BCF-0192	
Sander vitreus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0192-3 BCF-0192	
Sander vitreus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0192-2 BCF-0192	
Sander vitreus	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological ROM:Ich:BCF-0192-1 BCF-0192	
Percopsis omiscomaycus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0422-2 BCF-0422	
Percopsis omiscomaycus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0422-1 BCF-0422	-1 EU524262
Percopsis omiscomaycus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0371-3 BCF-0371	
Percopsis omiscomaycus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0371-2 BCF-0371	
Percopsis omiscomaycus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0371-1 BCF-0371	-1 EU524265
Percopsis omiscomaycus	Canada: Manitoba: Lac Winnipeg	tissue UOG:Bio:BCF-0327-2 BCF-0327	-2 EU524266
Percopsis omiscomaycus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0125-3 BCF-0125	-3 EU524267
Percopsis omiscomaycus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0125-2 BCF-0125	-2 EU524268
Percopsis omiscomaycus	Canada: Quebec: Fleuve Saint-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0125-1 BCF-0125	-1 EU524269
Ichthyomyzon castaneus	Canada: Ontario: Pere Marquette River, Michigan Lake	tissue UOG:Bio:BCF-0896-3 BCF-0896	-3 EU524087
Ichthyomyzon castaneus	Canada: Ontario: Pere Marquette River, Michigan Lake	tissue UOG:Bio:BCF-0896-2 BCF-0896	-2 EU524088
Ichthyomyzon castaneus	Canada: Ontario: Pere Marquette River, Michigan Lake	tissue UOG:Bio:BCF-0896-1 BCF-0896	-1 EU524089
Ichthyomyzon fossor	Canada: Ontario: Nine Mile River, Huron Lake	tissue UOG:Bio:BCF-0895-3 BCF-0895	-3 EU524090
Ichthyomyzon fossor	Canada: Ontario: Nine Mile River, Huron Lake	tissue UOG:Bio:BCF-0895-1 BCF-0895	-1 EU524091
Ichthyomyzon fossor	Canada: Ontario: Hog Creek, Huron Lake	tissue UOG:Bio:BCF-0894-2 BCF-0894	-2 EU524092
Ichthyomyzon fossor	Canada: Ontario: Hog Creek, Huron Lake	tissue UOG:Bio:BCF-0894-1 BCF-0894	-1 EU524093
Ichthyomyzon fossor	Canada: Ontario: Coldwater Creek, Huron Lake	tissue UOG:Bio:BCF-0893-1 BCF-0893	-1 EU524094

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Ichthyomyzon fossor	Canada: Ontario: Coldwater Creek, Huron Lake	tissue		BCF-0893-3	EU524095
Ichthyomyzon fossor	Canada: Ontario: Coldwater Creek, Huron Lake	tissue	UOG:Bio:BCF-0893-2	BCF-0893-2	EU524096
Ichthyomyzon unicuspis	Canada: Ontario: Lake Erie Canada: Ontario: Lake Erie		ROM:Ich:BCF-0555-3	BCF-0555-3 BCF-0555-2	EU524097 EU524098
Ichthyomyzon unicuspis	Canada: Ontario: Lake Erie		ROM:Ich:BCF-0555-2		EU324098 EU524099
Ichthyomyzon unicuspis		1 0	ROM:Ich:BCF-0555-1	BCF-0555-1 BCF-0005-4	
Ichthyomyzon unicuspis Ichthyomyzon unicuspis	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	1 0	ROM:Ich:BCF-0005-4 ROM:Ich:BCF-0005-3	BCF-0005-4 BCF-0005-3	EU524100 EU524101
Ichthyomyzon unicuspis	Canada: Quebec: Fleuve St-Laurent, rivière Richeneu Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook		ROM:Ich:BCF-0003-3	BCF-0003-3 BCF-0004-3	EU524101 EU524102
Ichthyomyzon unicuspis	Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook		ROM:Ich:BCF-0004-2	BCF-0004-3 BCF-0004-2	EU524102 EU524103
Ichthyomyzon unicuspis	Canada: Quebec: Riviere Richelieu, Saint-Ours	1 0	ROM:Ich:BCF-0004-2	BCF-0004-2 BCF-0005-1	EU524103
Ichthyomyzon unicuspis	Canada: Quebec: Ruisseau Hinchinbrook		ROM:Ich:BCF-0003-1	BCF-0004-1	EU524104
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	1 0	ROM:Ich:BCF-0007-3	BCF-0007-3	EU524109
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie		ROM:Ich:BCF-0007-2	BCF-0007-3	EU524110
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie		ROM:Ich:BCF-0007-1	BCF-0007-1	EU524111
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook		ROM:Ich:BCF-0003-2	BCF-0003-2	EU524112
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook	1 0	ROM:Ich:BCF-0003-1	BCF-0003-1	EU524113
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere a la truite		ROM:Ich:BCF-0002-2	BCF-0002-2	EU524114
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere a la truite	1 0	ROM:Ich:BCF-0002-1	BCF-0002-1	EU524115
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere du Sud		ROM:Ich:BCF-0001-3	BCF-0001-3	EU524116
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere du Sud		ROM:Ich:BCF-0001-2	BCF-0001-2	EU524117
Lampetra appendix	Canada: Quebec: Riviere du Sud		ROM:Ich:BCF-0001-1	BCF-0001-1	EU524118
Petromyzon marinus	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0008-1	BCF-0008-1	EU524270
Petromyzon marinus	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite		ROM:Ich:BCF-0006-3	BCF-0006-3	EU524271
Petromyzon marinus	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	1 0	ROM:Ich:BCF-0006-2	BCF-0006-2	EU524272
Petromyzon marinus	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	1 0	ROM:Ich:BCF-0006-1	BCF-0006-1	EU524273
Platichthys flesus	Canada: Ontario: Lake Erie		ROM:Ich:BCF-0527-1	BCF-0527-1	EU524278
Platichthys flesus	Canada: Ontario: Lake Erie		ROM:Ich:BCF-0522-1	BCF-0522-1	EU524279
Coregonus artedi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0568-12	BCF-0568-12	EU523939
Coregonus artedi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0568-11	BCF-0568-11	EU523940
Coregonus artedi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0568-1	BCF-0568-1	EU523941
Coregonus artedi	Canada: Manitoba: Lac Winnipeg	tissue	UOG:Bio:BCF-0320-4	BCF-0320-4	EU523942
Coregonus artedi	Canada: Manitoba: Lac Winnipeg	tissue	UOG:Bio:BCF-0320-3	BCF-0320-3	EU523943
Coregonus artedi	Canada: Manitoba: Lac Winnipeg	tissue	UOG:Bio:BCF-0320-2	BCF-0320-2	EU523944
Coregonus artedi	Canada: Manitoba: Lac Winnipeg	tissue	UOG:Bio:BCF-0320-1	BCF-0320-1	EU523945
Coregonus autumnalis	United States: Alaska: Kaktovik lagoon	tissue	UOG:Bio:BCF-0708-5	BCF-0708-5	EU523946
Coregonus autumnalis	United States: Alaska: Kaktovik lagoon	tissue	UOG:Bio:BCF-0708-4	BCF-0708-4	EU523947
Coregonus autumnalis	United States: Alaska: Kaktovik lagoon	tissue	UOG:Bio:BCF-0708-3	BCF-0708-3	EU523948
Coregonus autumnalis	United States: Alaska: Kaktovik lagoon	tissue	UOG:Bio:BCF-0708-2	BCF-0708-2	EU523949
Coregonus autumnalis	United States: Alaska: Kaktovik lagoon	tissue	UOG:Bio:BCF-0708-10	BCF-0708-10	EU523950
Coregonus autumnalis	United States: Alaska: Kaktovik lagoon	tissue	UOG:Bio:BCF-0708-1	BCF-0708-1	EU523951
Coregonus clupeaformis	Canada: British Columbia: Swan lake	tissue	UOG:Bio:BCF-0627-3	BCF-0627-3	EU523952
Coregonus clupeaformis	Canada: British Columbia: Swan lake	tissue	UOG:Bio:BCF-0627-2	BCF-0627-2	EU523953
Coregonus clupeaformis	Canada: British Columbia: Swan lake	tissue	UOG:Bio:BCF-0627-1	BCF-0627-1	EU523954
Coregonus clupeaformis	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0590-3	BCF-0590-3	EU523955
Coregonus clupeaformis	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0590-2	BCF-0590-2	EU523956
Coregonus clupeaformis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue		BCF-0269-3	EU523957
Coregonus clupeaformis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0269-2	BCF-0269-2	EU523958
Coregonus clupeaformis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0269-1	BCF-0269-1	EU523959
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-6		EU523960
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-12		EU523961
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-11		EU523962
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-10		EU523963
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-1		EU523964
Coregonus huntsmani	Canada: New Brunswick:		ACL12	ACL12	EU524489
Coregonus kiyi	Canada: Ontario: Lake Superior	tissue	UOG:Bio:BCF-0613-2		EU523965
Coregonus laurettae	United States: Alaska: Yukon river	tissue	UOG:Bio:BCF-0709-10		EU523966
Coregonus laurettae	United States: Alaska: Yukon river	tissue	UOG:Bio:BCF-0709-1		EU523967
Coregonus laurettae	Canada: Yukon Territory: Tanana river	tissue		BCF-0632-3	EU523968 EU523969
Coregonus laurettae Coregonus laurettae	Canada: Yukon Territory: Tanana river Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0632-2 UOG:Bio:BCF-0632-1	BCF-0632-2 BCF-0632-1	EU523969 EU523970
Coregonus laurettae Coregonus laurettae	Canada: Yukon Territory: Tanana river Canada: Yukon Territory: Yukon river	tissue tissue		BCF-0632-1 BCF-0594-3	EU523970 EU523971
Coregonus laurettae	Canada: Yukon Territory: Yukon river Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0594-1		EU523971 EU523972
Coregonus nasus	United States: Alaska: Selawik river, Kotzebve sound	tissue	UOG:Bio:BCF-0710-10		EU323972 EU523973
Coregonus masus	omed States. Maska. Sciawik Hver, Kolzenve Sound	ussuc	555.bi0.bcr-0/10-10	DC1 -0/10-10	LO343713

Coregonus nasus	United States: Alaska: Selawik river, Kotzebve sound	tissue	UOG:Bio:BCF-0710-1	BCF 0710 1	EU523974
Coregonus nasus	United States: Alaska: Tanana river	tissue	UOG:Bio:BCF-0626-3	BCF-0626-3	EU523975
Coregonus nasus	United States: Alaska: Tanana river	tissue	UOG:Bio:BCF-0626-2		EU523976
Coregonus nasus	United States: Alaska: Tanana river	tissue	UOG:Bio:BCF-0626-1	BCF-0626-1	EU523970 EU523977
Coregonus nasus	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0591-3	BCF-0591-3	EU523978
Coregonus nasus	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0591-2	BCF-0591-2	EU523978 EU523979
Coregonus nigripinnis	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0614-2	BCF-0614-2	EU523979 EU523980
Coregonus nigripinnis	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0614-1	BCF-0614-1	EU523980 EU523981
Coregonus sardinella	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0567-11		EU523981 EU523982
•	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0567-10		EU523982 EU523983
Coregonus sardinella	Canada: British Columbia: Atlin lake	tissue	UOG:Bio:BCF-0631-2		
Coregonus sardinella Coregonus sardinella	Canada: British Columbia: Atlin lake Canada: British Columbia: Atlin lake	tissue	UOG:Bio:BCF-0631-1		EU523984 EU523985
Coregonus sardinella	Canada: Yukon Territory: 6 miles river	tissue	UOG:Bio:BCF-0630-2		EU523985 EU523986
Coregonus sardinella	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0593-1		EU523980 EU523987
Coregonus zenithicus	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0615-2	BCF-0615-2	EU523987 EU523988
•				BCF-0615-1	
Coregonus zenithicus	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0615-1		EU523989
Coregonus zenithicus	Canada: Ontario: Lake Huron Canada: British Columbia: Parc Ouest	tissue	UOG:Bio:BCF-0567-12		EU523990
Oncorhynchus clarki		tissue	UOG:Bio:BCF-0604-2		EU524190
Oncorhynchus clarki	Canada: British Columbia: Parc Ouest	tissue	UOG:Bio:BCF-0604-1	BCF-0604-1	EU524191
Oncorhynchus clarki	Canada: British Columbia: Dewar creek	tissue	UOG:Bio:BCF-0624-2	BCF-0624-2	EU524192
Oncorhynchus clarki	Canada: British Columbia: Dewar creek	tissue	UOG:Bio:BCF-0624-1	BCF-0624-1	EU524193
Oncorhynchus clarki	Canada: British Columbia: Bull river	tissue	UOG:Bio:BCF-0623-2	BCF-0623-2	EU524194
Oncorhynchus clarki	Canada: British Columbia: Bull river	tissue	UOG:Bio:BCF-0623-1	BCF-0623-1	EU524195
Oncorhynchus clarki	Canada: British Columbia: Mayer Lake	tissue	UOG:Bio:BCF-0622-2	BCF-0622-2	EU524196
Oncorhynchus clarki	Canada: British Columbia: Mayer Lake	tissue	UOG:Bio:BCF-0622-1	BCF-0622-1	EU524197
Oncorhynchus clarki	Canada: British Columbia: Chonat lake, Quadra Island	tissue	UOG:Bio:BCF-0621-2		EU524198
Oncorhynchus clarki	Canada: British Columbia: Chonat lake, Quadra Island	tissue	UOG:Bio:BCF-0621-1	BCF-0621-1	EU524199
Oncorhynchus clarki	Canada: British Columbia: Parc Ouest	tissue	UOG:Bio:BCF-0603-2	BCF-0603-2	EU524200
Oncorhynchus clarki	Canada: British Columbia: Parc Ouest	tissue	UOG:Bio:BCF-0603-1	BCF-0603-1	EU524201
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-8	BCF-0818-8	EU524202
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-7	BCF-0818-7	EU524203
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-6	BCF-0818-6	EU524204
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-5	BCF-0818-5	EU524205
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-4	BCF-0818-4	EU524206
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-3	BCF-0818-3	EU524207
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-2	BCF-0818-2	EU524208
Oncorhynchus gorbuscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-1	BCF-0818-1	EU524209
Oncorhynchus keta	Canada: British Columbia:		ACL96	ACL96	EU525056
Oncorhynchus keta	Canada: British Columbia:		ACL95	ACL95	EU525057
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-8		EU524210
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-7		EU524211
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-6	BCF-0819-6	EU524212
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-5	BCF-0819-5	EU524213
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-4	BCF-0819-4	EU524214
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-2	BCF-0819-2	EU524215
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-1	BCF-0819-1	EU524216
Oncorhynchus mykiss	Canada: Ontario: Welland river, city of welland	tissue	UOG:Bio:BCF-0725-1	BCF-0725-1	EU524217
Oncorhynchus mykiss	Canada: British Columbia: Eutsuke lake	tissue	UOG:Bio:BCF-0635-3	BCF-0635-3	EU524218
Oncorhynchus mykiss	Canada: British Columbia: Eutsuke lake	tissue	UOG:Bio:BCF-0635-2	BCF-0635-2	EU524219
Oncorhynchus mykiss	Canada: British Columbia: Eutsuke lake	tissue	UOG:Bio:BCF-0635-1	BCF-0635-1	EU524220
Oncorhynchus mykiss	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas		ROM:Ich:BCF-0033-2	BCF-0033-2	EU524221
Oncorhynchus mykiss	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	1 0	ROM:Ich:BCF-0033-1	BCF-0033-1	EU524222
Oncorhynchus nerka	Canada: British Columbia: Babine lake	tissue	UOG:Bio:BCF-0648-5	BCF-0648-5	EU524223
Oncorhynchus nerka	Canada: British Columbia: Babine lake	tissue	UOG:Bio:BCF-0648-4	BCF-0648-4	EU524224
Oncorhynchus nerka	Canada: British Columbia: Babine lake	tissue	UOG:Bio:BCF-0648-3	BCF-0648-3	EU524225
Oncorhynchus nerka	Canada: British Columbia: Babine lake	tissue	UOG:Bio:BCF-0648-1	BCF-0648-1	EU524226
Oncorhynchus tshawytscha	Canada: British Columbia: Big Qualicum River	tissue	UOG:Bio:BCF-0813-3	BCF-0813-3	EU524227
Oncorhynchus tshawytscha	Canada: British Columbia: Big Qualicum River	tissue	UOG:Bio:BCF-0813-2	BCF-0813-2	EU524228
Oncorhynchus tshawytscha	Canada: British Columbia: Big Qualicum River	tissue	UOG:Bio:BCF-0813-1	BCF-0813-1	EU524229
Oncorhynchus tshawytscha	Canada: British Columbia: Harrison River	tissue	UOG:Bio:BCF-0813-8	BCF-0813-8	EU524230
Oncorhynchus tshawytscha	Canada: British Columbia: Harrison River	tissue	UOG:Bio:BCF-0813-7	BCF-0813-7	EU524231
Oncorhynchus tshawytscha	Canada: British Columbia: Harrison River	tissue	UOG:Bio:BCF-0813-6	BCF-0813-6	EU524232
Oncorhynchus tshawytscha	Canada: British Columbia: Harrison River	tissue	UOG:Bio:BCF-0813-5	BCF-0813-5	EU524233

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Oncorhynchus tshawytscha	Canada: British Columbia: Big Qualicum River	tissue		BCF-0813-4	EU524234
Prosopium coulterii	Canada: British Columbia:	tissue	ACL186	ACL186	EU525103
Prosopium coulterii	Canada: British Columbia:	tissue	ACL34	ACL34	EU525104
Prosopium cylindraceum	Canada: British Columbia: Atlin lake	tissue	UOG:Bio:BCF-0680-3	BCF-0680-3	EU524288
Prosopium cylindraceum	Canada: British Columbia: Atlin lake	tissue	UOG:Bio:BCF-0680-2	BCF-0680-2	EU524289
Prosopium cylindraceum	Canada: British Columbia: Atlin lake	tissue	UOG:Bio:BCF-0680-1	BCF-0680-1	EU524290
Prosopium cylindraceum	Canada: British Columbia: MacDonald Lake	tissue	UOG:Bio:BCF-0679-3	BCF-0679-3	EU524291
Prosopium cylindraceum	Canada: British Columbia: MacDonald Lake	tissue	UOG:Bio:BCF-0679-2	BCF-0679-2	EU524292
Prosopium cylindraceum	Canada: British Columbia: MacDonald Lake	tissue	UOG:Bio:BCF-0679-1	BCF-0679-1	EU524293
Prosopium cylindraceum	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0644-2	BCF-0644-2	EU524294
Prosopium cylindraceum	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0644-1	BCF-0644-1	EU524295
Prosopium cylindraceum	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0645-2	BCF-0645-2	EU524296
Prosopium williamsoni	Canada: British Columbia: Burnt river	tissue	UOG:Bio:BCF-0634-4	BCF-0634-4	EU524297
Prosopium williamsoni	Canada: British Columbia: Burnt river	tissue	UOG:Bio:BCF-0634-3	BCF-0634-3	EU524298
Prosopium williamsoni	Canada: British Columbia: Burnt river	tissue	UOG:Bio:BCF-0634-2	BCF-0634-2	EU524299
Prosopium williamsoni	Canada: British Columbia: Burnt river	tissue	UOG:Bio:BCF-0634-1	BCF-0634-1	EU524300
Prosopium williamsoni	Canada: British Columbia: Montana lake	tissue	UOG:Bio:BCF-0633-4	BCF-0633-4	EU524301
Prosopium williamsoni	Canada: British Columbia: Montana lake	tissue	UOG:Bio:BCF-0633-3	BCF-0633-3	EU524302
Prosopium williamsoni	Canada: British Columbia: Montana lake	tissue	UOG:Bio:BCF-0633-2	BCF-0633-2	EU524303
Prosopium williamsoni	Canada: British Columbia: Montana lake	tissue	UOG:Bio:BCF-0633-1	BCF-0633-1	EU524304
Prosopium williamsoni	Canada: British Columbia: Omenica river	tissue	UOG:Bio:BCF-0688-4	BCF-0688-4	EU522439
Prosopium williamsoni	Canada: British Columbia: Omenica river	tissue	UOG:Bio:BCF-0688-3	BCF-0688-3	EU522440
•	Canada: British Columbia: Omenica river				
Prosopium williamsoni		tissue	UOG:Bio:BCF-0688-1	BCF-0688-1	EU522438
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Ouasiemsca	tissue	UOG:Bio:BCF-0607-3	BCF-0607-3	EU524349
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Ouasiemsca	tissue	UOG:Bio:BCF-0607-1	BCF-0607-1	EU524350
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Metabetchouane		UOG:Bio:BCF-0606-4	BCF-0606-4	EU524351
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Metabetchouane	tissue	UOG:Bio:BCF-0606-2	BCF-0606-2	EU524352
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Metabetchouane	tissue	UOG:Bio:BCF-0606-1	BCF-0606-1	EU524353
Salmo trutta	Canada: New Brunswick: Mc Quarrie Brook	tissue	UOG:Bio:BCF-0581-7	BCF-0581-7	EU524354
Salmo trutta	Canada: New Brunswick: Mc Quarrie Brook	tissue	UOG:Bio:BCF-0581-6	BCF-0581-6	EU524355
Salmo trutta	Canada: New Brunswick: Mc Quarrie Brook	morphological	ROM:Ich:BCF-0581-3	BCF-0581-3	EU524356
Salvelinus alpinus	Canada: Quebec: Lac Paul, Parc National Gaspesie	tissue	UOG:Bio:BCF-0598-4	BCF-0598-4	EU524357
Salvelinus alpinus	Canada: Quebec: Lac Paul, Parc National Gaspesie	tissue	UOG:Bio:BCF-0598-2	BCF-0598-2	EU524358
Salvelinus alpinus	Canada: Quebec: Lac Paul, Parc National Gaspesie	tissue	UOG:Bio:BCF-0598-1	BCF-0598-1	EU524359
Salvelinus alpinus	Canada: Quebec: Bald moutain pound	tissue	UOG:Bio:BCF-0597-4	BCF-0597-4	EU524360
Salvelinus alpinus	Canada: Quebec: Bald moutain pound	tissue	UOG:Bio:BCF-0597-3	BCF-0597-3	EU524361
Salvelinus alpinus	Canada: Quebec: Bald moutain pound	tissue	UOG:Bio:BCF-0597-2	BCF-0597-2	EU524362
Salvelinus alpinus	Canada: Quebec: Bald moutain pound	tissue	UOG:Bio:BCF-0597-1	BCF-0597-1	EU524363
Salvelinus confluentus	Canada: Quebec: Parc Ouest, Waterton lake	tissue	UOG:Bio:BCF-0612-3	BCF-0612-3	EU522398
Salvelinus confluentus	Canada: Quebec: Parc Ouest, Waterton lake	tissue	UOG:Bio:BCF-0612-2		EU524364
Salvelinus confluentus	Canada: Quebec: Parc Ouest, Waterton lake	tissue	UOG:Bio:BCF-0612-1		EU524365
Salvelinus confluentus	United States: Washington: Yakima	tissue	UOG:Bio:BCF-0638-4	BCF-0638-4	EU522399
Salvelinus confluentus	United States: Washington: Yakima United States: Washington: Yakima	tissue	UOG:Bio:BCF-0638-3	BCF-0638-3	EU522400
Salvelinus confluentus	United States: Washington: Yakima United States: Washington: Yakima		UOG:Bio:BCF-0638-2		
	•	tissue			EU522401
Salvelinus confluentus	United States: Washington: Yakima	tissue	UOG:Bio:BCF-0638-1	BCF-0638-1	EU522402
Salvelinus confluentus	Canada: Quebec: Parc Ouest, Waterton lake	tissue	UOG:Bio:BCF-0612-4	BCF-0612-4	EU522403
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Wapizagonkec	tissue	UOG:Bio:BCF-0595-3	BCF-0595-3	EU522409
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Wapizagonkec	tissue	UOG:Bio:BCF-0595-1	BCF-0595-1	EU522405
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie		ROM:Ich:BCF-0031-3	BCF-0031-3	EU522406
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie		ROM:Ich:BCF-0031-2	BCF-0031-2	EU522407
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie		ROM:Ich:BCF-0031-1	BCF-0031-1	EU522408
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Trinite	morphological	ROM:Ich:BCF-0030-3	BCF-0030-3	EU524366
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Trinite	morphological	ROM:Ich:BCF-0030-2	BCF-0030-2	EU524367
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Trinite	morphological	ROM:Ich:BCF-0030-1	BCF-0030-1	EU522404
Salvelinus malma	Canada: British Columbia: Chignuk lake	tissue	UOG:Bio:BCF-0641-4	BCF-0641-4	EU522410
Salvelinus malma	Canada: British Columbia: Chignuk lake	tissue	UOG:Bio:BCF-0641-3	BCF-0641-3	EU522411
Salvelinus malma	Canada: British Columbia: Chignuk lake	tissue	UOG:Bio:BCF-0641-2	BCF-0641-2	EU522412
Salvelinus malma	Canada: British Columbia: Chignuk lake	tissue	UOG:Bio:BCF-0641-1	BCF-0641-1	EU522413
Salvelinus malma	Canada: British Columbia: Moutain CK	tissue	UOG:Bio:BCF-0640-4	BCF-0640-4	EU522414
Salvelinus malma	Canada: British Columbia: Moutain CK	tissue	UOG:Bio:BCF-0640-3	BCF-0640-3	EU522415
Salvelinus malma	Canada: British Columbia: Moutain CK	tissue	UOG:Bio:BCF-0640-2	BCF-0640-2	EU522416
Salvelinus malma	Canada: British Columbia: Moutain CK	tissue	UOG:Bio:BCF-0640-1	BCF-0640-1	EU522417
Salvelinus namaycush	Canada: British Columbia: Minnewanka lake	tissue	UOG:Bio:BCF-0642-4	BCF-0642-4	EU522417
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Salvelinus namaycush	Canada: British Columbia: Minnewanka lake	tissue	UOG:Bio:BCF-0642-3	BCF-0642-3	EU522419
Salvelinus namaycush	Canada: British Columbia: Minnewanka lake	tissue	UOG:Bio:BCF-0642-2	BCF-0642-2	EU522420
Salvelinus namaycush	Canada: British Columbia: Minnewanka lake	tissue	UOG:Bio:BCF-0642-1	BCF-0642-1	EU522421
Salvelinus namaycush	Canada: Quebec: Lac Simon	tissue	UOG:Bio:BCF-0600-4	BCF-0600-4	EU522422
Salvelinus namaycush	Canada: Quebec: Lac Simon	tissue	UOG:Bio:BCF-0600-3	BCF-0600-3	EU522423
Salvelinus namaycush	Canada: Quebec: Lac Simon	tissue	UOG:Bio:BCF-0600-2	BCF-0600-2	EU522424
Salvelinus namaycush	Canada: Quebec: Lac Simon	tissue	UOG:Bio:BCF-0600-1	BCF-0600-1	EU522425
Stenodus leucichthys	Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0646-4	BCF-0646-4	EU522428
Stenodus leucichthys	Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0646-3	BCF-0646-3	EU522429
Stenodus leucichthys	Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0646-2	BCF-0646-2	EU522430
Stenodus leucichthys	Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0646-1	BCF-0646-1	EU522431
Stenodus leucichthys	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0592-4	BCF-0592-4	EU522432
Stenodus leucichthys	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0592-3	BCF-0592-3	EU522433
Stenodus leucichthys	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0592-2	BCF-0592-2	EU522426
Stenodus leucichthys	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0592-1	BCF-0592-1	EU522427
Thymallus arcticus	Canada: British Columbia: Teslin river	tissue	UOG:Bio:BCF-0687-4	BCF-0687-4	EU522434
Thymallus arcticus	Canada: British Columbia: Teslin river	tissue	UOG:Bio:BCF-0687-3	BCF-0687-3	EU522435
Thymallus arcticus	Canada: British Columbia: Teslin river	tissue	UOG:Bio:BCF-0687-2	BCF-0687-2	EU522436
Thymallus arcticus	Canada: British Columbia: Teslin river	tissue	UOG:Bio:BCF-0687-1	BCF-0687-1	EU522437
Aplodinotus grunniens	Canada: Ontario: Lake Erie	morphologic	cal ROM:Ich:BCF-0513-3	BCF-0513-3	EU522443
Aplodinotus grunniens	Canada: Ontario: Lake Erie	morphologic	cal ROM:Ich:BCF-0513-2	BCF-0513-2	EU522444
Aplodinotus grunniens	Canada: Ontario: Lake Erie	morphologic	cal ROM:Ich:BCF-0513-1	BCF-0513-1	EU522445
Aplodinotus grunniens	Canada: Manitoba: Lac Winnipeg	tissue	UOG:Bio:BCF-0326-3	BCF-0326-3	EU523920
Aplodinotus grunniens	Canada: Manitoba: Lac Winnipeg	tissue	UOG:Bio:BCF-0326-2	BCF-0326-2	EU523921
Aplodinotus grunniens	Canada: Manitoba: Lac Winnipeg	tissue	UOG:Bio:BCF-0326-1	BCF-0326-1	EU523922
Aplodinotus grunniens	Canada: Quebec: Baie Missisquoi	tissue	UOG:Bio:BCF-0195-3	BCF-0195-3	EU522441
Aplodinotus grunniens	Canada: Quebec: Baie Missisquoi	tissue	UOG:Bio:BCF-0195-2	BCF-0195-2	EU522442
Aplodinotus grunniens	Canada: Quebec: Baie Missisquoi	tissue	UOG:Bio:BCF-0195-1	BCF-0195-1	EU523923
Dallia pectoralis	United States: Alaska: Spring creek, Kenai pennin	morphologic	cal ROM:Ich:BCF-0705-2	BCF-0705-2	EU524007
Dallia pectoralis	United States: Alaska: Spring creek, Kenai pennin	morphologi	cal ROM:Ich:BCF-0705-1	BCF-0705-1	EU524008
Umbra limi	Canada: Ontario: Tea Creek	morphologic	cal ROM:Ich:BCF-0433-3	BCF-0433-3	EU522446
Umbra limi	Canada: Ontario: Tea Creek	morphologic	cal ROM:Ich:BCF-0433-2	BCF-0433-2	EU522447
Umbra limi	Canada: Ontario: Tea Creek		cal ROM:Ich:BCF-0433-1	BCF-0433-1	EU522448
Umbra limi	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphologic	cal ROM:Ich:BCF-0036-3	BCF-0036-3	EU522449
Umbra limi	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphologic	cal ROM:Ich:BCF-0036-2	BCF-0036-2	EU522450
Umbra limi	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphologic	cal ROM:Ich:BCF-0036-1	BCF-0036-1	EU522451
Umbra limi	Canada: Quebec: Fleuve St-Laurent, lac St-Paul		cal ROM:Ich:BCF-0034-3	BCF-0034-3	EU522452
Umbra limi	Canada: Quebec: Fleuve St-Laurent, lac St-Paul		cal ROM:Ich:BCF-0034-2	BCF-0034-2	EU522453
Umbra limi	Canada: Quebec: Lac Saint-Paul	1 0	cal ROM:Ich:BCF-0034-1	BCF-0034-1	EU524391

BOLD TaxonID Tree

Project : Freshwater Fish of Canada (FFC)

Subprojects : Barcoding of Canadian freshwater fishes[BCF]

Barcoding of Canadian freshwater fishes Part II[BCFB]

Date : 5-February-2008

Data Type : Nucleotide

Distance Model : Kimura 2 Parameter

Codon Positions : 1st, 2nd, 3rd

Labels : SampleID,

Colorization :

Sequence Count : 1360
Species count : 190
Genus count : 85
Family count : 28

Unidentified : 0

