

# Identifying Canadian Freshwater Fishes through DNA Barcodes

Nicolas Hubert<sup>1</sup>, Robert Hanner<sup>2</sup>, Erling Holm<sup>3</sup>, Nicholas E. Mandrak<sup>4</sup>, Eric Taylor<sup>5</sup>, Mary Burridge<sup>3</sup>, Douglas Watkinson<sup>6</sup>, Pierre Dumont<sup>7</sup>, Allen Curry<sup>8</sup>, Paul Bentzen<sup>9</sup>, Junbin Zhang<sup>2</sup>, Julien April<sup>1</sup>, Louis Bernatchez<sup>1\*</sup>

**1** Département de biologie, Pavillon Charles-Eugène-Marchand, Université Laval, Sainte-Foy, Québec, Canada, **2** Canadian Barcode of Life Network, Biodiversity Institute of Ontario, University of Guelph, Guelph, Ontario, Canada, **3** Department of Natural History, Royal Ontario Museum, Toronto, Ontario, Canada, **4** Great Lakes Laboratory for Fisheries and Aquatic Sciences, Fisheries and Oceans Canada, Burlington, Ontario, Canada, **5** Department of Zoology, Vancouver, British Columbia, Canada, **6** Fisheries and Oceans Canada, Central & Arctic Region, Freshwater Institute, Winnipeg, Manitoba, Canada, **7** Ministère des Ressources naturelles et de la faune du Québec, Direction de l'aménagement de la faune de Montréal, de Laval et de la Montérégie, Longueuil, Québec, Canada, **8** Fish and Wildlife Research Unit, University of New Brunswick, Fredericton, New Brunswick, Canada, **9** Department of Biology, Dalhousie University, Halifax, Nova Scotia, Canada

## 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 salmon 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 conspecifics. 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.

**Citation:** Hubert N, Hanner R, Holm E, Mandrak NE, Taylor E, et al. (2008) Identifying Canadian Freshwater Fishes through DNA Barcodes. PLoS ONE 3(6): e2490. doi:10.1371/journal.pone.0002490

**Editor:** Hans Ellegren, University of Uppsala, Sweden

**Received:** December 5, 2007; **Accepted:** May 19, 2008; **Published:** June 18, 2008

**Copyright:** © 2008 Hubert et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Funding:** This research was supported through funding to the Canadian Barcode of Life Network from NSERC, Genome Canada (through the Ontario Genomics Institute). Other sponsors listed at [www.BOLNET.ca](http://www.BOLNET.ca).

**Competing Interests:** The authors have declared that no competing interests exist.

\* E-mail: [Louis.Bernatchez@bio.ulaval.ca](mailto:Louis.Bernatchez@bio.ulaval.ca)

## 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:

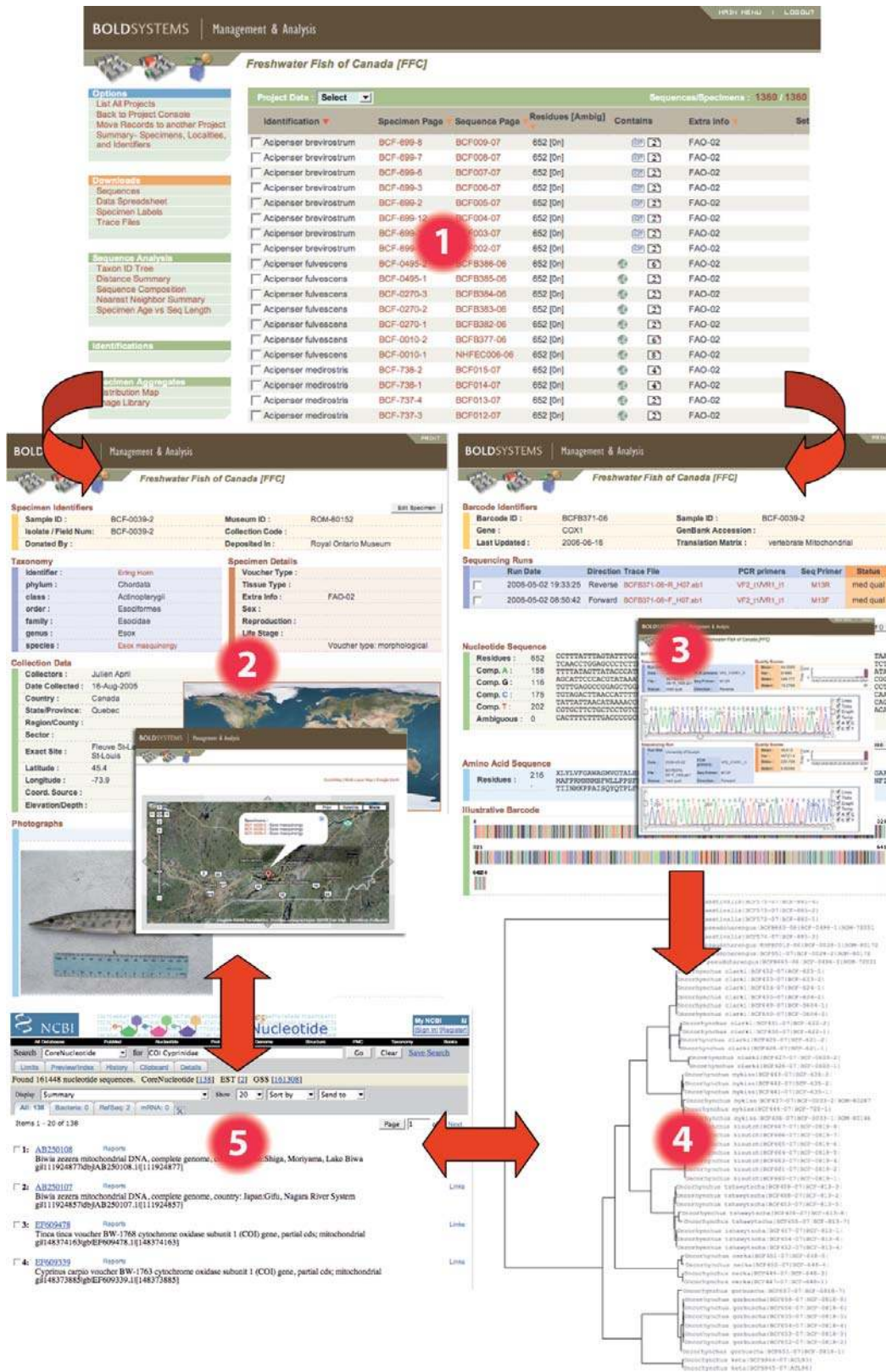
1. Species name
2. Voucher data
3. Collection record
4. Identifier of the specimen
5. COI sequence of at least 500 bp
6. PCR primers used to generate the amplicon
7. Trace files

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 specimen 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 ethanol-fixed 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 (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 20mM Tris-HCl (pH8.8), 2mM Mg SO<sub>4</sub>, 0.1% Triton X-100), 0.625 µl of MgCl<sub>2</sub> (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).

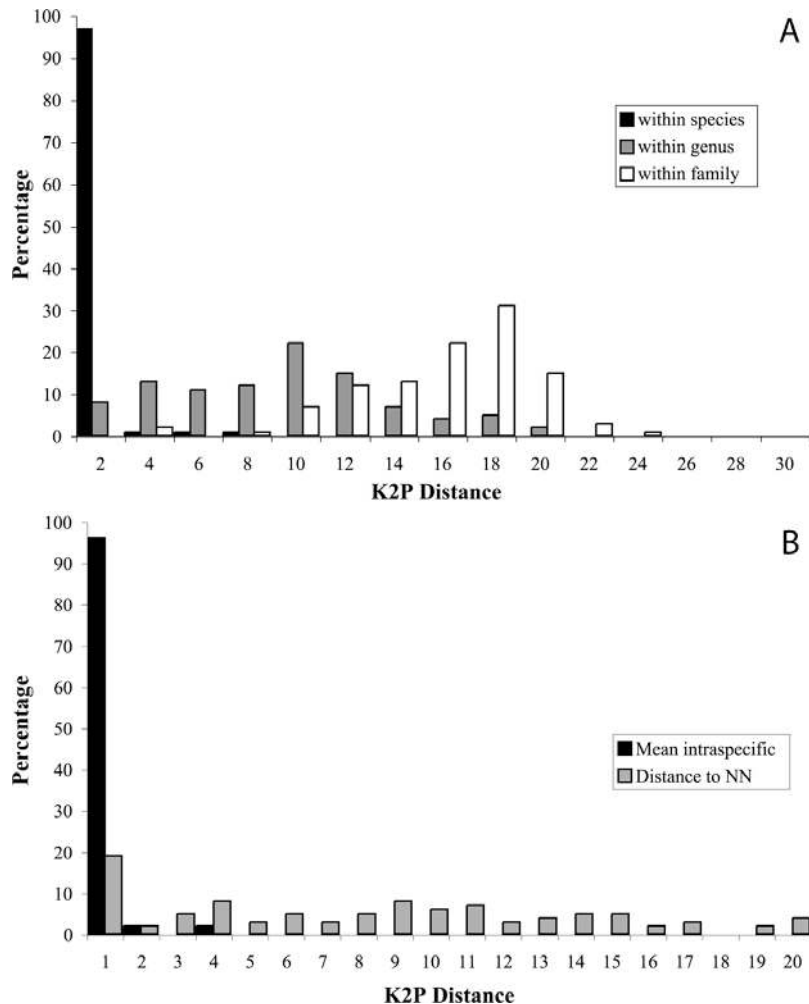
Average intraspecific variation was unrelated to the number of individuals analysed (average intraspecific K2P distance =  $0.015N + 0.135$ ; Covariance Analysis;  $F = 2.22$ ;  $P = 0.138$ ), suggesting representative sampling for the different species. The mean K2P distance of individual within species 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

doi:10.1371/journal.pone.0002490.t001



**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 cornutus*), 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. buchanaui*, between the shad *Alosa aestivalis* and *A. pseudoharengus*, between the putative species in the cisco species flock, *Coregonus artedii*, *C. hoyi*, *C. kiyi*, *C. nigripinnis* and *C. zenithicus*; and, between the darters *Etheostoma nigrum* and *E. olmstedii*. Nevertheless, we only found evidence of introgressive hybridisation between two diverging species in the case of the darters *Etheostoma nigrum* and *E. olmstedii* 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).

Order	Family	Number of species					
		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

doi:10.1371/journal.pone.0002490.t002

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 realistic 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 new tools useful for the practice of conservation and forensic 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)

## Acknowledgments

We wish to thank the following people for their valuable help during the present survey: Adam Betty, Thomas Pratt, Fraser Neave, Robert Devlin, Ruth Withler, John Radford, William Franzin from Fisheries and Oceans, Canada; Patrick Nelson from North/South Consultants Inc.; Lynda Corkum from the University of Windsor; Fred Johnson from Natural Resources, Canada; Marc Mingelbier, Yves Chagnon, Bruno Paré, Francois Girard, Jean Leclerc, Huguette Massé, Bernard Dumas, Chantal Côté, Francis Bouchard, Michel Plante, Philippe Brodeur, Richard Parizeau, Suzanne Lepage, Nathalie La Violette from Natural Resources, Québec; Guy Mayer, commercial fisherman, Québec; Bryan Neff, Nicholas Sweet from the University of Western Ontario; Bernard Côté from the Aquarium du Québec; Bernard Angers from the University of Montréal, Marco Rodriguez from the University of Trois-Rivières, Michael Nelson from the Essex Region Conservation Authority; Chris Wilson from the Trent University; Mark Gautreau from the University of New Brunswick; Julian Dodson, Julie Turgeon from the Laval University; Margaret Docker from the University of Manitoba; Yves Gauthier, Serge Pépin from the Biodôme, Montréal; Andrea Drauch, Josh Israel, John Velasquez, Bernie May from the University of California; John Wenburg, Randy Brown from U.S. Fish & Wildlife Service; Kevin Meyer, Tony Lamansky from the Idaho Department of Fish and Game; Andrew Whiteley from the University of Alaska, Steeve Leadbeater from the University of New Brunswick, Andrew Bentley and Ed Wiley from Kansas University. We acknowledge the support of Richard Winterbottom from the Royal Ontario Museum for providing facilities at the Ichthyology collection and Miranda Elliot for specimen cataloguing there; Tyler Zemlak and Christa Maitland University of Guelph, and Vicky Albert and Lucie Papillon in the Université Laval for the help during the laboratory work. We also thank Paul Hebert for his support and interest throughout the present study. Finally, we thank David Schindel, the academic editor and the anonymous referees for their constructive insights and comments.

## 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.

## References

1. Hebert PDN, Cywinka A, Ball SL, deWaard JR (2003) Biological identifications through DNA barcodes. *Proceedings of the Royal Society of London, Series B* 270: 313–321.
2. Hebert PDN, Gregory TR (2005) The promise of DNA barcoding for taxonomy. *Systematic Biology* 54: 852–859.
3. Ratnasingham S, Hebert PDN Bold: The barcode of life data system ([www.barcodinglife.org](http://www.barcodinglife.org)). *Molecular Ecology Notes* 7: 355–364.
4. Hebert PDN, Stoeckle M, Zemlak T, Francis CM (2004) Identification of birds through DNA barcodes. *Plos Biology* 2: 1657–1668.
5. Ball SL, Hebert PDN, Burian SK, Webb JM (2005) Biological identification of mayflies (Ephemeroptera) using DNA barcodes. *Journal of the North American Benthological Society* 24: 508–524.
6. Saunders G (2005) Applying DNA barcoding to red macroalgae: a preliminary appraisal holds promise for future applications. *Philosophical Transactions of the Royal Society, Series B* 360: 1879–1888.
7. Ward RD, Zemlak TS, Innes BH, Last PR, Hebert PDN (2005) DNA barcoding Australia's fish species. *Philosophical Transactions of the Royal Society, Series B* 360: 1847–1857.

8. Clare EB, Lim BK, Engstrom MD, Eger JL, Hebert PDN (2006) DNA barcoding of Neotropical bats: species identification and discovery within Guyana. *Molecular Ecology Notes* 7: 184–190.
9. Cywinska A, Hunter FF, Hebert PDN (2006) Identifying Canadian mosquito species through DNA barcodes. *Medical and Veterinary Entomology* 20: 413–424.
10. Kerr KC, Stoeckle MY, Dove CJ, Weigt LA, Francis CM, et al. (2007) Comprehensive DNA barcode coverage of North American birds. *Molecular Ecology Notes* doi: 10.1111/j.1471-8286.2007.01670.x.
11. Robins JH, Hingston M, Matisoo-Smith E, Ross HA (2007) Identifying *Rattus* species using mitochondrial DNA. *Molecular Ecology Notes* doi: 10.1111/j.1471-8286.2007.01752.x.
12. Siefert KA, Samson RA, deWaard JR, Houbraken J, Lévesque A, et al. (2007) Prospects for fungus identification using COI DNA barcodes with penicillium as a test case. *Proceedings of the National Academy of Sciences, USA* 104: 3901–3906.
13. Will KW, Rubinoff D (2004) Myth of the molecule: DNA barcodes for species cannot replace morphology for identification and classification. *Cladistics* 20: 47–55.
14. Ebach MC, Holdrege C (2005) DNA barcoding is no substitute for taxonomy. *Nature* 434: 697.
15. Pfenninger M, Cordellier M, Streit B (2006) Comparing the efficacy of morphologic and DNA-based taxonomy in the freshwater gastropod genus *Radix* (Basommatophora, Pulmonata). *BMC Evolutionary Biology* 6: 100.
16. Caterino MS, Tishechkin AK (2006) DNA identification and morphological description of the first confirmed larvae of Heteriinae (Coleoptera: Histeridae). *Systematic Entomology* 31: 405–418.
17. Pegg CG, Sinclair B, Briskey L, Aspden WJ (2006) MtDNA barcode identification of fish larvae in the southern great barrier reef, Australia. *Scientia Marina* 70: 7–12.
18. Hebert PDN, Penton EH, Burns JM, Janzen DH, Hallwachs W (2004) Ten species in one: DNA barcoding reveals cryptic species in the neotropical skipper butterfly *Astraptes fulgerator*. *Proceedings of the National Academy of Sciences, USA* 101: 14812–14817.
19. Witt J, Threlloff DS, Doug L, Hebert PDN (2006) DNA barcoding reveals extraordinary cryptic diversity in an amphipod genus: implications for desert spring conservation. *Molecular Ecology* 15: 3073–3082.
20. Smith MA, Wood DM, Janzen DH, Hallwachs W, Hebert PDN (2007) DNA barcodes affirm that 16 species of apparently generalist tropical parasitoid flies (Diptera, Tachinidae) are not all generalists. *Proceedings of the National Academy of Sciences, USA* 104: 4967–4972.
21. Dawney NR, Ogden R, McEwing R, Carvalho GR, Thorpe RS (2007) Validation of the barcoding gene COI for use in forensic genetic species identification. *Forensic Science International* in press.
22. Nelson LA, Wallman JF, Dowton M (2007) Using COI barcodes to identify forensically and medically important blowflies. *Medical and Veterinary Entomology* 21: 44–52.
23. Pfenninger MC, Nowak C, Kley D, Steinke D, Streit B (2007) Utility of DNA taxonomy and barcoding for the inference of larval community structure in morphologically cryptic *Chironomus* (Diptera) species. *Molecular Ecology* 16: 1957–1968.
24. Scheffer SJ, Lewis ML (2006) Mitochondrial phylogeography of the vegetable pest *Liriomyza trifolii* (Diptera: Agromyzidae): diverged clades and invasive populations. *Annals of Entomological Society of America* 99: 991–998.
25. Corin SE, Lester PJ, Abbott KL, Ritchie PA (2007) Inferring historical introduction pathways with mitochondrial DNA: the case of introduced Argentine ants (*Linepithema humile*) into New Zealand. *Diversity and Distributions* doi: 10.1111/j.1472-4642.2007.00355.x.
26. Pons J (2006) DNA-based identification of preys from non-destructive, total DNA extractions of predators using arthropod universal primers. *Molecular Ecology Notes* 6: 623–626.
27. Birky CW, Fuerst P, Maruyama T (1989) Organelle gene diversity under migration and drift: equilibrium expectations, approach to equilibrium, effects of heteroplasmic cells and comparison to nuclear genes. *Genetics* 121: 613–627.
28. Brown WM, George M Jr, Wilson AC (1979) Rapid evolution of animal mitochondrial DNA. *Proceedings of the National Academy of Sciences, USA* 76: 1967–1971.
29. Pamilo P, Nei M (1988) Relationships between gene trees and species trees. *Molecular Biology and Evolution* 5: 568–581.
30. Funk DJ, Omland KE (2003) Species-level paraphyly and polyphyly: frequency, causes and consequences, with insights from animal mitochondrial DNA. *Annual Review of Ecology, Evolution and Systematics* 34: 397–423.
31. Zhang DX, Hewitt GM (1996) Nuclear integrations: challenge for mitochondria DNA markers. *Trends in Ecology and Evolution* 11: 247–251.
32. Hubert N, Torricco JP, Bonhomme F, Renno JF (2007) Species polyphyly and mtDNA introgression among three *Serrasalmus* sister-species. *Molecular Phylogenetics and Evolution* 46: 375–381.
33. McPhail JD, Lindsey CC (1970) Freshwater fishes of northwestern Canada and Alaska. *Bulletin of the Fisheries Research Board Canada*, 173.
34. Mandrak NE, Crossman EJ (1992) A checklist of Ontario freshwater fishes. Toronto, Canada: Royal Ontario Museum Publications.
35. Nelson JS, Paetz MJ (1992) The fishes of Alberta. Edmonton, Canada: University of Alberta Press.
36. Scott WB, Crossman EJ (1998) Freshwater fishes of Canada. Oakville, Canada: Galt House Publications.
37. Stewart KW, Watkinson DA (2004) The freshwater fishes of Manitoba. Winnipeg, Canada: The University of Manitoba Press.
38. Ward RD, Woodwark M, Skininski DOF (1994) A comparison of genetic diversity levels in marine, freshwater and anadromous fish. *Journal of Fish Biology* 44: 213–232.
39. Canadian Endangered Species Conservation Council (CESCC) (2001) Wild Species 2000: the general status of species in Canada. Ottawa, Ontario: Minister of Public Works and Government Services Canada.
40. Hajibabaei M, deWaard JR, Ivanova NV, Ratnasingham S, Dooh RT, et al. (2005) Critical factors for assembling a high volume of DNA barcodes. *Philosophical Transactions of the Royal Society, Series B* 360: 1959–1967.
41. Ivanova NV, deWaard J, Hebert PDN (2006) An inexpensive, automation-friendly protocol for recovering high-quality DNA. *Molecular Ecology Notes* 6: 998–1002.
42. Ivanova NV, Zemlak TS, Hanner RH, Hebert PDN (2007) Universal primers cocktails for fish DNA barcoding. *Molecular Ecology Notes* doi: 10.1111/j.1471-8286.2007.01748.x.
43. Kimura M (1980) A simple method for estimating evolutionary rate of base substitutions through comparative studies of nucleotide sequences. *Journal of Molecular Evolution* 15: 111–120.
44. Saitou N, Nei M (1987) The neighbour-joining method: a new method for reconstructing evolutionary trees. *Molecular Biology and Evolution* 4: 406–425.
45. Statgraphic (1999) Statistical package. Los Angeles CA: Statistical Graphics Corporation.
46. Meyer CP, Paulay G (2005) DNA barcoding: error rates based on comprehensive sampling. *PLOS Biology* 3: 2229–2238.
47. Pons J, Barraclough TG, Gomez-Zurita J, Cardoso A, Duran DP, et al. (2006) Sequence-based species delimitation for the DNA taxonomy of undescribed insects. *Systematic Biology* 55: 595–606.
48. Saccone C, De Giorgi C, Cissi C, Pesole G, Reyes A (1999) Evolutionary genomics in Metazoa: the mitochondrial DNA as a model system. *Gene* 238: 195–209.
49. Kingman JFC (1982) The coalescent. *Stochastic Process and their Applications* 13: 245–248.
50. Tajima F (1983) Evolutionary relationships of DNA sequences in finite populations. *Genetics* 105: 437–460.
51. Hickerson MJ, Meyer CP, Moritz C (2006) DNA barcoding will often fail to discover new animal species over broad parameter space. *Systematic Biology* 55: 729–739.
52. Meier R, Shiyang K, Vaidya G, Ng PKL (2006) DNA barcoding and taxonomy in Diptera: a tale of high intraspecific variability and low identification success. *Systematic Biology* 55: 715–728.
53. Abdo A, Golding GB (2007) A step toward barcoding life: a model-based, decision-theoretic method to assign genes to preexisting species groups. *Systematic Biology* 56: 44–56.
54. Nielsen R, Matz M (2006) Statistical approaches for DNA barcoding. *Systematic Biology* 55: 162–169.
55. Bernatchez L, Wilson CC (1998) Comparative phylogeography of Nearctic and Palearctic fishes. *Molecular Ecology* 7: 431–452.
56. Barber P, Boyce SL (2006) Estimating diversity of Indo-Pacific coral reef stomatopods through DNA barcoding of stomatopod larvae. *Proceedings of the Royal Society of London, Series B, Biological Sciences* 273: 2053–2061.



Species name	Geographic locality	Voucher type	Voucher number	BOLD	GenBank
				Specimen number	Accession numl
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-8	BCF-0699-8	EU523870
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-7	BCF-0699-7	EU523871
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-6	BCF-0699-6	EU523872
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-3	BCF-0699-3	EU523873
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-2	BCF-0699-2	EU523874
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-12	BCF-0699-12	EU523875
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-11	BCF-0699-11	EU523876
Acipenser brevirostrum	Canada: New Brunswick: Aquaculture	tissue	UOG:Bio:BCF-0699-10	BCF-0699-10	EU523877
Acipenser fulvescens	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue	UOG:Bio:BCF-010-1	BCF-010-1	EU523878
Acipenser fulvescens	Canada: Ontario: Georgian Bay	morphological	ROM:Ich:BCF-0495-2	BCF-0495-2	EU524392
Acipenser fulvescens	Canada: Ontario: Georgian Bay	morphological	ROM:Ich:BCF-0495-1	BCF-0495-1	EU524393
Acipenser fulvescens	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0270-3	BCF-0270-3	EU524394
Acipenser fulvescens	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0270-2	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, 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	UOG:Bio:BCF-0738-2	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	UOG:Bio:BCF-0737-4	BCF-0737-4	EU523882
Acipenser medirostris	United States: Washington: Sacramento river	tissue	UOG:Bio:BCF-0737-3	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 oxyrinchus	Canada: Quebec: Fleuve Saint-Laurent, Ile Madame	morphological	ROM:Ich:BCF-009-1	BCF-009-1	EU523886
Acipenser oxyrinchus	Canada: Quebec: Fleuve St-Laurent, Ile Madame	morphological	ROM:Ich:BCF-009-5	BCF-009-5	EU524398
Acipenser oxyrinchus	Canada: Quebec: Fleuve St-Laurent, Ile Madame	morphological	ROM:Ich:BCF-009-4	BCF-009-4	EU524399
Acipenser oxyrinchus	Canada: Quebec: Fleuve St-Laurent, Ile Madame	morphological	ROM:Ich:BCF-009-3	BCF-009-3	EU524400
Acipenser oxyrinchus	Canada: Quebec: Fleuve St-Laurent, Ile Madame	morphological	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	UOG:Bio:BCF-0735-2	BCF-0735-2	EU523888
Acipenser transmontanus	United States: Washington: Nechako reservoir	tissue	UOG:Bio:BCF-0735-1	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	morphological	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
Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological	ROM:Ich:BCF-0103-3	BCF-0103-3	EU524453
Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological	ROM:Ich:BCF-0103-2	BCF-0103-2	EU524454
Carpiodes cyprinus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological	ROM:Ich:BCF-0103-1	BCF-0103-1	EU524455
Carpiodes cyprinus	Canada: Quebec: Baie Missisquoi	tissue	UOG:Bio:BCF-0101-3	BCF-0101-3	EU524456

<i>Carpiodes cyprinus</i>	Canada: Quebec: Baie Missisquoi	tissue	UOG:Bio:BCF-0101-2	BCF-0101-2	EU524457
<i>Carpiodes cyprinus</i>	Canada: Quebec: Baie Missisquoi	tissue	UOG:Bio:BCF-0101-1	BCF-0101-1	EU524458
<i>Carpiodes cyprinus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0100-3	BCF-0100-3	EU524459
<i>Carpiodes cyprinus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0100-2	BCF-0100-2	EU524460
<i>Carpiodes cyprinus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0100-1	BCF-0100-1	EU524461
<i>Catostomus catostomus</i>	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0670-5	BCF-0670-5	EU523925
<i>Catostomus catostomus</i>	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0670-4	BCF-0670-4	EU523926
<i>Catostomus catostomus</i>	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0670-3	BCF-0670-3	EU523927
<i>Catostomus catostomus</i>	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0670-2	BCF-0670-2	EU523928
<i>Catostomus catostomus</i>	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0670-1	BCF-0670-1	EU523929
<i>Catostomus catostomus</i>	Canada: Quebec: Saint Lawrence River St-Nicolas	tissue	UOG:Bio:BCF-0112-1	BCF-0112-1	EU523930
<i>Catostomus catostomus</i>	Canada: Ontario: Lake Ontario	morphological	ROM:Ich:BCF-0523-1	BCF-0523-1	EU524462
<i>Catostomus catostomus</i>	Canada: Ontario: Pine River	morphological	ROM:Ich:BCF-0434-4	BCF-0434-4	EU524463
<i>Catostomus catostomus</i>	Canada: Ontario: Pine River	morphological	ROM:Ich:BCF-0434-3	BCF-0434-3	EU524464
<i>Catostomus catostomus</i>	Canada: Ontario: Pine River	morphological	ROM:Ich:BCF-0434-2	BCF-0434-2	EU524465
<i>Catostomus catostomus</i>	Canada: Ontario: Pine River	morphological	ROM:Ich:BCF-0434-1	BCF-0434-1	EU524466
<i>Catostomus catostomus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	tissue	UOG:Bio:BCF-0266-2	BCF-0266-2	EU524467
<i>Catostomus catostomus</i>	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0112-2	BCF-0112-2	EU524468
<i>Catostomus catostomus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0111-3	BCF-0111-3	EU524469
<i>Catostomus catostomus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0111-2	BCF-0111-2	EU524470
<i>Catostomus catostomus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0111-1	BCF-0111-1	EU524471
<i>Catostomus commersonii</i>	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological	ROM:Ich:BCF-0104-1	BCF-0104-1	EU523931
<i>Catostomus commersonii</i>	Canada: New Brunswick: Gagetown	tissue	UOG:Bio:BCF-0579-4	BCF-0579-4	EU524472
<i>Catostomus commersonii</i>	Canada: New Brunswick: Gagetown	tissue	UOG:Bio:BCF-0579-3	BCF-0579-3	EU524473
<i>Catostomus commersonii</i>	Canada: New Brunswick: Gagetown	tissue	UOG:Bio:BCF-0579-2	BCF-0579-2	EU524474
<i>Catostomus commersonii</i>	Canada: New Brunswick: Gagetown	tissue	UOG:Bio:BCF-0579-1	BCF-0579-1	EU524475
<i>Catostomus commersonii</i>	Canada: Ontario: Credit River	morphological	ROM:Ich:BCF-0435-2	BCF-0435-2	EU524476
<i>Catostomus commersonii</i>	Canada: Ontario: Credit River	morphological	ROM:Ich:BCF-0435-1	BCF-0435-1	EU524477
<i>Catostomus commersonii</i>	Canada: Ontario: Lake Ontario	morphological	ROM:Ich:BCF-0426-1	BCF-0426-1	EU524478
<i>Catostomus commersonii</i>	Canada: Ontario: Sydenham River	morphological	ROM:Ich:BCF-0403-2	BCF-0403-2	EU524479
<i>Catostomus commersonii</i>	Canada: Ontario: Sydenham River	morphological	ROM:Ich:BCF-0403-1	BCF-0403-1	EU524480
<i>Catostomus commersonii</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0107-3	BCF-0107-3	EU524481
<i>Catostomus commersonii</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0104-4	BCF-0104-4	EU524482
<i>Catostomus commersonii</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0104-3	BCF-0104-3	EU524483
<i>Catostomus commersonii</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological	ROM:Ich:BCF-0104-2	BCF-0104-2	EU524484
<i>Catostomus macrocheilus</i>	Canada: British Columbia: Mission creek	tissue	UOG:Bio:BCF-0658-2	BCF-0658-2	EU523932
<i>Catostomus macrocheilus</i>	Canada: British Columbia: Salwein creek	tissue	UOG:Bio:BCF-0658-1	BCF-0658-1	EU523933
<i>Catostomus platyrhynchus</i>	Canada: Saskatchewan: Belly River, Saskatchewan River	tissue	UOG:Bio:BCF-0874-1	BCF-0874-1	EU522454
<i>Catostomus platyrhynchus</i>	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-5	BCF-0779-5	EU523934
<i>Catostomus platyrhynchus</i>	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-4	BCF-0779-4	EU523935
<i>Catostomus platyrhynchus</i>	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-3	BCF-0779-3	EU523936
<i>Catostomus platyrhynchus</i>	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-2	BCF-0779-2	EU523937
<i>Catostomus platyrhynchus</i>	Canada: Saskatchewan: Saskatchewan River, Lee creek	tissue	UOG:Bio:BCF-0779-1	BCF-0779-1	EU523938
<i>Erimyzon sucetta</i>	Canada: Ontario: Long Point Bay	morphological	ROM:Ich:BCF-0514-1	BCF-0514-1	EU524567
<i>Hypentelium nigricans</i>	Canada: Ontario: Big Otter Creek	morphological	ROM:Ich:BCF-0413-1	BCF-0413-1	EU524667
<i>Hypentelium nigricans</i>	Canada: Ontario: Grand River	morphological	ROM:Ich:BCF-0393-4	BCF-0393-4	EU524668
<i>Hypentelium nigricans</i>	Canada: Ontario: Grand River	morphological	ROM:Ich:BCF-0393-3	BCF-0393-3	EU524669
<i>Hypentelium nigricans</i>	Canada: Ontario: Grand River	morphological	ROM:Ich:BCF-0393-2	BCF-0393-2	EU524670
<i>Hypentelium nigricans</i>	Canada: Ontario: Grand River	morphological	ROM:Ich:BCF-0393-1	BCF-0393-1	EU524671
<i>Hypentelium nigricans</i>	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-5	BCF-0376-5	EU524672
<i>Hypentelium nigricans</i>	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-4	BCF-0376-4	EU524673
<i>Hypentelium nigricans</i>	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-3	BCF-0376-3	EU524674
<i>Hypentelium nigricans</i>	Canada: Ontario: Thames River	morphological	ROM:Ich:BCF-0376-1	BCF-0376-1	EU524675
<i>Ictiobus cyprinellus</i>	Canada: Ontario: Lake Ontario	morphological	ROM:Ich:BCF-0488-1	BCF-0488-1	EU524687
<i>Ictiobus cyprinellus</i>	Canada: Ontario: Welland River	morphological	ROM:Ich:BCF-0502-1	BCF-0502-1	EU524688
<i>Ictiobus niger</i>	United States: Kansas	tissue	UOG:Bio:BCF-0707-1	BCF-0707-1	EU524107
<i>Minytrema melanops</i>	Canada: Ontario: East shore, Down Island	tissue	UOG:Bio:BCF-0566-5	BCF-0566-5	EU524839
<i>Minytrema melanops</i>	Canada: Ontario: Detroit River	tissue	UOG:Bio:BCF-0566-23	BCF-0566-23	EU524840
<i>Minytrema melanops</i>	Canada: Ontario: Detroit River	tissue	UOG:Bio:BCF-0566-21	BCF-0566-21	EU524841
<i>Minytrema melanops</i>	Canada: Ontario: St Clair river	tissue	UOG:Bio:BCF-0566-17	BCF-0566-17	EU524842
<i>Minytrema melanops</i>	Canada: Ontario: St Clair river	tissue	UOG:Bio:BCF-0566-16	BCF-0566-16	EU524843
<i>Minytrema melanops</i>	Canada: Ontario: St Clair river	tissue	UOG:Bio:BCF-0566-15	BCF-0566-15	EU524844
<i>Minytrema melanops</i>	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	EU524146
Moxostoma anisurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0415-3	BCF-0415-3	EU524846
Moxostoma anisurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0415-1	BCF-0415-1	EU524847
Moxostoma anisurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0368-5	BCF-0368-5	EU524848
Moxostoma anisurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0368-4	BCF-0368-4	EU524849
Moxostoma anisurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0368-1	BCF-0368-1	EU524850
Moxostoma anisurum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0096-2	BCF-0096-2	EU524851
Moxostoma anisurum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0096-1	BCF-0096-1	EU524852
Moxostoma anisurum	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0094-3	BCF-0094-3	EU524853
Moxostoma anisurum	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0094-2	BCF-0094-2	EU524854
Moxostoma anisurum	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0094-1	BCF-0094-1	EU524855
Moxostoma carinatum	Canada: Quebec: Riviere Richelieu, Saint-Ours	tissue UOG:Bio:BCF-0098-1	BCF-0098-1	EU524147
Moxostoma carinatum	Canada: Quebec: Riviere Richelieu, Saint-Ours	tissue UOG:Bio:BCF-0099-1	BCF-0099-1	EU524148
Moxostoma carinatum	Canada: Ontario: Trent River	morphological ROM:Ich:BCF-0531-1	BCF-0531-1	EU524856
Moxostoma carinatum	Canada: Ontario: Trent River	morphological ROM:Ich:BCF-0516-2	BCF-0516-2	EU524857
Moxostoma carinatum	Canada: Ontario: Madawaska River	morphological ROM:Ich:BCF-0445-1	BCF-0445-1	EU524858
Moxostoma carinatum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0099-4	BCF-0099-4	EU524859
Moxostoma carinatum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0099-2	BCF-0099-2	EU524860
Moxostoma duquesnii	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0517-6	BCF-0517-6	EU524861
Moxostoma duquesnii	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0517-5	BCF-0517-5	EU524862
Moxostoma duquesnii	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0517-4	BCF-0517-4	EU524863
Moxostoma duquesnii	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0517-3	BCF-0517-3	EU524864
Moxostoma duquesnii	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0517-2	BCF-0517-2	EU524865
Moxostoma duquesnii	Canada: Ontario: Fanshawe Lake	morphological ROM:Ich:BCF-0517-1	BCF-0517-1	EU524866
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-6	BCF-0416-6	EU524867
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-5	BCF-0416-5	EU524868
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-4	BCF-0416-4	EU524869
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-3	BCF-0416-3	EU524870
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-2	BCF-0416-2	EU524871
Moxostoma erythrurum	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0416-1	BCF-0416-1	EU524872
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-4	BCF-0397-4	EU524873
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-3	BCF-0397-3	EU524874
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-2	BCF-0397-2	EU524875
Moxostoma erythrurum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0397-1	BCF-0397-1	EU524876
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0617-15	BCF-0617-15	EU524877
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0617-14	BCF-0617-14	EU524878
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0617-13	BCF-0617-13	EU524879
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-9	BCF-0617-9	EU524880
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-8	BCF-0617-8	EU524881
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-7	BCF-0617-7	EU524882
Moxostoma hubbsi	Canada: Quebec: Fleuve St-Laurent	tissue UOG:Bio:BCF-0617-6	BCF-0617-6	EU524883
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-5	BCF-0617-5	EU524884
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-4	BCF-0617-4	EU524885
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-3	BCF-0617-3	EU524886
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-2	BCF-0617-2	EU524887
Moxostoma hubbsi	Canada: Quebec: Tadoussac	tissue UOG:Bio:BCF-0617-1	BCF-0617-1	EU524888
Moxostoma macrolepidotum	Canada: Quebec: Saint Lawrence River St-Nicolas	tissue UOG:Bio:BCF-0091-2	BCF-0091-2	EU524149
Moxostoma macrolepidotum	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0532-5	BCF-0532-5	EU524889
Moxostoma macrolepidotum	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0532-4	BCF-0532-4	EU524890
Moxostoma macrolepidotum	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0532-3	BCF-0532-3	EU524891
Moxostoma macrolepidotum	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0490-1	BCF-0490-1	EU524892
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0093-3	BCF-0093-3	EU524893
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0093-2	BCF-0093-2	EU524894
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0093-1	BCF-0093-1	EU524895
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0092-3	BCF-0092-3	EU524896
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0092-2	BCF-0092-2	EU524897
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0092-1	BCF-0092-1	EU524898
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0091-4	BCF-0091-4	EU524899
Moxostoma macrolepidotum	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0091-3	BCF-0091-3	EU524900
Moxostoma macrolepidotum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0377-2	BCF-0377-2	EU524901
Moxostoma macrolepidotum	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0377-1	BCF-0377-1	EU524902
Moxostoma macrolepidotum	Canada: Ontario: Trent River	morphological ROM:Ich:BCF-0516-1	BCF-0516-1	EU524903
Moxostoma valenciennesi	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue UOG:Bio:BCF-0097-1	BCF-0097-1	EU524150

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	BCF-0576-2	EU524703
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	tissue	UOG:Bio:BCF-0162-3	BCF-0162-3	EU524412
Ambloplites rupestris	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0162-2	BCF-0162-2	EU524413
Ambloplites rupestris	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0162-1	BCF-0162-1	EU524414
Micropterus dolomieu	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological ROM:Ich:BCF-0165-1		BCF-0165-1	EU524131
Micropterus dolomieu	Canada: Ontario: Tea Creek	morphological ROM:Ich:BCF-0444-2		BCF-0444-2	EU524810
Micropterus dolomieu	Canada: Ontario: Tea Creek	morphological ROM:Ich:BCF-0444-1		BCF-0444-1	EU524811
Micropterus dolomieu	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0215-3		BCF-0215-3	EU524812
Micropterus dolomieu	Canada: Ontario: Lac Opinicon	morphological 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	morphological ROM:Ich:BCF-0173-3		BCF-0173-3	EU524815
Micropterus dolomieu	Canada: Ontario: Wanapitei River	morphological 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

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

<i>Myoxocephalus quadricornis</i>	Canada: Ontario: James Bay	morphological ROM:Ich:BCF-0398-1	BCF-0398-1	EU524913
<i>Myoxocephalus thompsonii</i>	Canada: Ontario: Lk. Superior-Whitefish Bay	morphological ROM:Ich:BCF-0337-2	BCF-0337-2	EU524914
<i>Myoxocephalus thompsonii</i>	Canada: Ontario: Lk. Superior-Whitefish Bay	morphological ROM:Ich:BCF-0337-1	BCF-0337-1	EU524915
<i>Myoxocephalus thompsonii</i>	Canada: Ontario: Lk. Huron-Meldrum Bay	morphological ROM:Ich:BCF-0333-3	BCF-0333-3	EU524916
<i>Myoxocephalus thompsonii</i>	Canada: Ontario: Lk. Huron-Meldrum Bay	morphological ROM:Ich:BCF-0333-2	BCF-0333-2	EU524917
<i>Myoxocephalus thompsonii</i>	Canada: Ontario: Lk. Huron-Meldrum Bay	morphological ROM:Ich:BCF-0333-1	BCF-0333-1	EU524918
<i>Acrocheilus alutaceus</i>	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0667-3	BCF-0667-3	EU523892
<i>Acrocheilus alutaceus</i>	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0667-2	BCF-0667-2	EU523893
<i>Campostoma anomalum</i>	Canada: Ontario: Cedar Creek	morphological ROM:Ich:BCF-0549-1	BCF-0549-1	EU524447
<i>Carassius auratus</i>	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0550-3	BCF-0550-3	EU524448
<i>Carassius auratus</i>	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0550-2	BCF-0550-2	EU524449
<i>Carassius auratus</i>	Canada: Ontario: Big Creek	morphological ROM:Ich:BCF-0550-1	BCF-0550-1	EU524450
<i>Clinostomus elongatus</i>	Canada: Ontario: Silver Creek	morphological ROM:Ich:BCF-0529-1	BCF-0529-1	EU524485
<i>Clinostomus elongatus</i>	Canada: Ontario: Fourteen Mile Creek	tissue UOG:Bio:BCF-0524-5	BCF-0524-5	EU524486
<i>Clinostomus elongatus</i>	Canada: :	tissue UOG:Bio:BCF-0524-2	BCF-0524-2	EU524487
<i>Clinostomus elongatus</i>	Canada: :	tissue UOG:Bio:BCF-0524-1	BCF-0524-1	EU524488
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-1	BCF-0051-1	EU524002
<i>Couesius plumbeus</i>	Canada: New Brunswick: Gagetown	morphological ROM:Ich:BCF-0586-1	BCF-0586-1	EU524522
<i>Couesius plumbeus</i>	Canada: Ontario: Sheridan Creek	morphological ROM:Ich:BCF-0429-1	BCF-0429-1	EU524523
<i>Couesius plumbeus</i>	Canada: Ontario: Lk. Huron-McGregor Bay	morphological ROM:Ich:BCF-0343-1	BCF-0343-1	EU524524
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	tissue UOG:Bio:BCF-0051-8	BCF-0051-8	EU524525
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-7	BCF-0051-7	EU524526
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-6	BCF-0051-6	EU524527
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-5	BCF-0051-5	EU524528
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-4	BCF-0051-4	EU524529
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-3	BCF-0051-3	EU524530
<i>Couesius plumbeus</i>	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0051-2	BCF-0051-2	EU524531
<i>Cyprinella spiloptera</i>	Canada: Quebec: Fleuve Saint-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0070-1	BCF-0070-1	EU524004
<i>Cyprinella spiloptera</i>	Canada: Quebec: Fleuve Saint-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0070-2	BCF-0070-2	EU524005
<i>Cyprinella spiloptera</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0379-3	BCF-0379-3	EU524539
<i>Cyprinella spiloptera</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0379-2	BCF-0379-2	EU524540
<i>Cyprinella spiloptera</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0379-1	BCF-0379-1	EU524541
<i>Cyprinella spiloptera</i>	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-4	BCF-0369-4	EU524542
<i>Cyprinella spiloptera</i>	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-3	BCF-0369-3	EU524543
<i>Cyprinella spiloptera</i>	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-2	BCF-0369-2	EU524544
<i>Cyprinella spiloptera</i>	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0369-1	BCF-0369-1	EU524545
<i>Cyprinella spiloptera</i>	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0289-1	BCF-0289-1	EU524546
<i>Cyprinella spiloptera</i>	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0070-4	BCF-0070-4	EU524547
<i>Cyprinella spiloptera</i>	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0070-3	BCF-0070-3	EU524548
<i>Cyprinus carpio</i>	Canada: Quebec: Lac Saint-Pierre, Pointe Yamachiche	tissue UOG:Bio:BCF-0048-1	BCF-0048-1	EU524006
<i>Cyprinus carpio</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-4	BCF-0049-4	EU524549
<i>Cyprinus carpio</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-3	BCF-0049-3	EU524550
<i>Cyprinus carpio</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-2	BCF-0049-2	EU524551
<i>Cyprinus carpio</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological ROM:Ich:BCF-0049-1	BCF-0049-1	EU524552
<i>Cyprinus carpio</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0048-3	BCF-0048-3	EU524553
<i>Cyprinus carpio</i>	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0047-3	BCF-0047-3	EU524554
<i>Cyprinus carpio</i>	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0047-2	BCF-0047-2	EU524555
<i>Cyprinus carpio</i>	Canada: Quebec: Baie Missisquoi	tissue UOG:Bio:BCF-0047-1	BCF-0047-1	EU524556
<i>Exoglossum maxillingua</i>	Canada: Quebec: Riviere Becancour	morphological ROM:Ich:BCF-0052-1	BCF-0052-1	EU524057
<i>Exoglossum maxillingua</i>	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-5	BCF-0052-5	EU524613
<i>Exoglossum maxillingua</i>	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-4	BCF-0052-4	EU524614
<i>Exoglossum maxillingua</i>	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-3	BCF-0052-3	EU524615
<i>Exoglossum maxillingua</i>	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0052-2	BCF-0052-2	EU524616
<i>Hybognathus argyritis</i>	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-7	BCF-0841-7	EU524069
<i>Hybognathus argyritis</i>	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-6	BCF-0841-6	EU524070
<i>Hybognathus argyritis</i>	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-5	BCF-0841-5	EU524071
<i>Hybognathus argyritis</i>	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-4	BCF-0841-4	EU524072
<i>Hybognathus argyritis</i>	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-3	BCF-0841-3	EU524073
<i>Hybognathus argyritis</i>	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-2	BCF-0841-2	EU524074
<i>Hybognathus argyritis</i>	United States: Missouri: Milk River	tissue UOG:Bio:BCF-0841-1	BCF-0841-1	EU522464
<i>Hybognathus hankinsoni</i>	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-5	BCF-0698-5	EU524075
<i>Hybognathus hankinsoni</i>	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-4	BCF-0698-4	EU524076
<i>Hybognathus hankinsoni</i>	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-3	BCF-0698-3	EU524077

Hybognathus hankinsoni	Canada: British Columbia: Bog pond	morphological ROM:Ich:BCF-0698-2	BCF-0698-2	EU524078
Hybognathus hankinsoni	United States: Missouri: Rock creek	tissue UOG:Bio:BCF-0842-2	BCF-0842-2	EU524079
Hybognathus hankinsoni	United States: Missouri: Rock creek	tissue UOG:Bio:BCF-0842-1	BCF-0842-1	EU524080
Hybognathus hankinsoni	Canada: Quebec: Ruisseau Charette	morphological ROM:Ich:BCF-0053-2	BCF-0053-2	EU524081
Hybognathus placitus	United States: Missouri: Rock creek	tissue UOG:Bio:BCF-0844-3	BCF-0844-3	EU524082
Hybognathus placitus	United States: Missouri: Rock creek	tissue UOG:Bio:BCF-0844-2	BCF-0844-2	EU524083
Hybognathus placitus	United States: Missouri: Rock creek	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-0055-1	BCF-0055-1	EU524086
Hybognathus regius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0054-7	BCF-0054-7	EU524662
Hybognathus regius	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0054-6	BCF-0054-6	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	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-5	BCF-0553-5	EU524797
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-4	BCF-0553-4	EU524798
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-3	BCF-0553-3	EU524799
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-2	BCF-0553-2	EU524800
Macrhybopsis storeriana	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0553-1	BCF-0553-1	EU524801
Margariscus margarita	Canada: Quebec: Lac Ecarte	morphological ROM:Ich:BCF-0089-1	BCF-0089-1	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



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: Chehalis river	tissue UOG:Bio:BCF-0660-3	BCF-0660-3	EU524152
Mylocheilus caurinus	Canada: British Columbia: Chehalis 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
Notemigonus crysoleucas	Canada: Quebec: Marais St-Eugene	morphological ROM:Ich:BCF-005810	BCF-005810	EU524937
Notemigonus crysoleucas	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0056-3	BCF-0056-3	EU524938
Notemigonus crysoleucas	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	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	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0256-4	BCF-0256-4	EU524958
Notropis atherinoides	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0256-3	BCF-0256-3	EU524959

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 buechanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-6	BCF-0409-6	EU524970
Notropis buechanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-5	BCF-0409-5	EU524971
Notropis buechanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-4	BCF-0409-4	EU524972
Notropis buechanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-3	BCF-0409-3	EU524973
Notropis buechanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-2	BCF-0409-2	EU524974
Notropis buechanani	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0409-1	BCF-0409-1	EU524975
Notropis buechanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-6	BCF-0385-6	EU524976
Notropis buechanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-5	BCF-0385-5	EU524977
Notropis buechanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-4	BCF-0385-4	EU524978
Notropis buechanani	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0385-3	BCF-0385-3	EU524979
Notropis buechanani	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-0526-1	BCF-0526-1	EU525001
Notropis hudsonius	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0362-3	BCF-0362-3	EU525002
Notropis hudsonius	Canada: Ontario: Lake Erie	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	morphological ROM:Ich:BCF-0461-1	BCF-0461-1	EU525067
Phoxinus neogaeus	Canada: Quebec: Aylmer, Compte de Pontiac	morphological ROM:Ich:BCF-0277-3	BCF-0277-3	EU525068
Phoxinus neogaeus	Canada: Quebec: Aylmer, Compte de Pontiac	morphological ROM:Ich:BCF-0277-2	BCF-0277-2	EU525069
Phoxinus neogaeus	Canada: Quebec: Aylmer, Compte de Pontiac	morphological ROM:Ich:BCF-0277-1	BCF-0277-1	EU525070
Phoxinus neogaeus	Canada: Quebec: Reserve Rouge-Matawin, lac Dalpec	morphological ROM:Ich:BCF-0074-3	BCF-0074-3	EU525071
Phoxinus neogaeus	::	morphological ROM:Ich:BCF-0074-2	BCF-0074-2	EU525072
Phoxinus neogaeus	::	morphological ROM:Ich:BCF-0073-2	BCF-0073-2	EU525073
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0075-1	BCF-0075-1	EU524276
Pimephales notatus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0401-3	BCF-0401-3	EU525074
Pimephales notatus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0401-2	BCF-0401-2	EU525075
Pimephales notatus	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0401-1	BCF-0401-1	EU525076
Pimephales notatus	Canada: Ontario: Lk. Huron-McGregor Bay	morphological ROM:Ich:BCF-0341-3	BCF-0341-3	EU525077
Pimephales notatus	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0216-3	BCF-0216-3	EU525078
Pimephales notatus	Canada: Ontario: Lac Opinicon	tissue UOG:Bio:BCF-0216-2	BCF-0216-2	EU525079
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0202-3	BCF-0202-3	EU525080
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0202-2	BCF-0202-2	EU525081
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological ROM:Ich:BCF-0202-1	BCF-0202-1	EU525082
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0075-3	BCF-0075-3	EU525083
Pimephales notatus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0075-2	BCF-0075-2	EU525084
Pimephales promelas	Canada: Quebec: Lac Wapizagonke	morphological ROM:Ich:BCF-0078-1	BCF-0078-1	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

<i>Pimephales promelas</i>	Canada: Ontario: Wetland E	morphological ROM:Ich:BCF-0462-2	BCF-0462-2	EU525088
<i>Pimephales promelas</i>	Canada: Ontario: Wetland E	morphological ROM:Ich:BCF-0462-1	BCF-0462-1	EU525089
<i>Pimephales promelas</i>	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0295-3	BCF-0295-3	EU525090
<i>Pimephales promelas</i>	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0295-2	BCF-0295-2	EU525091
<i>Pimephales promelas</i>	Canada: Quebec: Etang de Graviere	morphological ROM:Ich:BCF-0265-3	BCF-0265-3	EU525092
<i>Pimephales promelas</i>	Canada: Quebec: Etang de Graviere	morphological ROM:Ich:BCF-0265-1	BCF-0265-1	EU525093
<i>Pimephales promelas</i>	Canada: Quebec: lac Wapizagonke	morphological ROM:Ich:BCF-0078-3	BCF-0078-3	EU525094
<i>Pimephales promelas</i>	Canada: Quebec: lac Wapizagonke	morphological ROM:Ich:BCF-0078-2	BCF-0078-2	EU525095
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Summit lake	morphological ROM:Ich:BCF-0704-4	BCF-0704-4	EU524311
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Summit lake	morphological ROM:Ich:BCF-0704-3	BCF-0704-3	EU524312
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Summit lake	morphological ROM:Ich:BCF-0704-2	BCF-0704-2	EU524313
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Summit lake	morphological ROM:Ich:BCF-0704-1	BCF-0704-1	EU524314
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Crooked river	morphological ROM:Ich:BCF-0703-4	BCF-0703-4	EU524315
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Crooked river	morphological ROM:Ich:BCF-0703-3	BCF-0703-3	EU524316
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Crooked river	morphological ROM:Ich:BCF-0703-2	BCF-0703-2	EU524317
<i>Ptychocheilus oregonensis</i>	Canada: British Columbia: Crooked river	morphological ROM:Ich:BCF-0703-1	BCF-0703-1	EU524318
<i>Rhinichthys atratulus</i>	Canada: Quebec: Riviere Becancour	tissue UOG:Bio:BCF-0079-1	BCF-0079-1	EU524322
<i>Rhinichthys atratulus</i>	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0585-4	BCF-0585-4	EU525115
<i>Rhinichthys atratulus</i>	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0585-3	BCF-0585-3	EU525116
<i>Rhinichthys atratulus</i>	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0585-2	BCF-0585-2	EU525117
<i>Rhinichthys atratulus</i>	Canada: New Brunswick: Mc Quarrie Brook	morphological ROM:Ich:BCF-0585-1	BCF-0585-1	EU525118
<i>Rhinichthys atratulus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	tissue UOG:Bio:BCF-0079-4	BCF-0079-4	EU525119
<i>Rhinichthys atratulus</i>	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	tissue UOG:Bio:BCF-0079-2	BCF-0079-2	EU525120
<i>Rhinichthys cataractae</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0773-2	BCF-0773-2	EU524323
<i>Rhinichthys cataractae</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0773-1	BCF-0773-1	EU524324
<i>Rhinichthys cataractae</i>	Canada: Ontario: Thames river	morphological ROM:Ich:BCF-0740-2	BCF-0740-2	EU524325
<i>Rhinichthys cataractae</i>	Canada: Ontario: Thames river	morphological ROM:Ich:BCF-0740-1	BCF-0740-1	EU524326
<i>Rhinichthys cataractae</i>	Canada: Quebec: Riviere Sainte-Marguerite	morphological ROM:Ich:BCF-0081-1	BCF-0081-1	EU524327
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Mars	morphological ROM:Ich:BCF-0263-3	BCF-0263-3	EU525121
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Mars	morphological ROM:Ich:BCF-0263-2	BCF-0263-2	EU525122
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Mars	morphological ROM:Ich:BCF-0263-1	BCF-0263-1	EU525123
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0082-4	BCF-0082-4	EU525124
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0082-3	BCF-0082-3	EU525125
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0082-1	BCF-0082-1	EU525126
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological ROM:Ich:BCF-0081-12	BCF-0081-12	EU525127
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological ROM:Ich:BCF-0081-11	BCF-0081-11	EU525128
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological ROM:Ich:BCF-0081-10	BCF-0081-10	EU525129
<i>Rhinichthys cataractae</i>	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	tissue UOG:Bio:BCF-0079-3	BCF-0079-3	EU525130
<i>Rhinichthys falcatus</i>	Canada: British Columbia: Fraser river	tissue UOG:Bio:BCF-0661-5	BCF-0661-5	EU524328
<i>Rhinichthys falcatus</i>	Canada: British Columbia: Fraser river	tissue UOG:Bio:BCF-0661-4	BCF-0661-4	EU524329
<i>Rhinichthys falcatus</i>	Canada: British Columbia: Fraser river	tissue UOG:Bio:BCF-0661-3	BCF-0661-3	EU524330
<i>Rhinichthys falcatus</i>	Canada: British Columbia: Fraser river	tissue UOG:Bio:BCF-0661-2	BCF-0661-2	EU524331
<i>Rhinichthys falcatus</i>	Canada: British Columbia: Fraser river	tissue UOG:Bio:BCF-0661-1	BCF-0661-1	EU524332
<i>Rhinichthys obtusus</i>	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0770-1	BCF-0770-1	EU524333
<i>Rhinichthys obtusus</i>	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0619-3	BCF-0619-3	EU524334
<i>Rhinichthys obtusus</i>	Canada: Ontario: Marden Creek	morphological ROM:Ich:BCF-0619-2	BCF-0619-2	EU524335
<i>Rhinichthys obtusus</i>	Canada: Ontario: Humber River	morphological ROM:Ich:BCF-0619-1	BCF-0619-1	EU524336
<i>Rhinichthys obtusus</i>	Canada: Ontario: Humber River	morphological ROM:Ich:BCF-0483-1	BCF-0483-1	EU525131
<i>Rhinichthys obtusus</i>	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0439-3	BCF-0439-3	EU525132
<i>Rhinichthys obtusus</i>	Canada: Ontario: Marden Creek	morphological ROM:Ich:BCF-0439-2	BCF-0439-2	EU525133
<i>Rhinichthys obtusus</i>	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0439-1	BCF-0439-1	EU525134
<i>Rhinichthys osculus</i>	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0666-5	BCF-0666-5	EU524337
<i>Rhinichthys osculus</i>	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0666-4	BCF-0666-4	EU524338
<i>Rhinichthys osculus</i>	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0666-3	BCF-0666-3	EU524339
<i>Rhinichthys osculus</i>	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0666-2	BCF-0666-2	EU524340
<i>Rhinichthys osculus</i>	Canada: British Columbia: Kettle river	tissue UOG:Bio:BCF-0666-1	BCF-0666-1	EU524341
<i>Rhinichthys umatilla</i>	Canada: British Columbia: Similkameen river	tissue UOG:Bio:BCF-0662-5	BCF-0662-5	EU524342
<i>Rhinichthys umatilla</i>	Canada: British Columbia: Similkameen river	tissue UOG:Bio:BCF-0662-4	BCF-0662-4	EU524343
<i>Rhinichthys umatilla</i>	Canada: British Columbia: Similkameen river	tissue UOG:Bio:BCF-0662-3	BCF-0662-3	EU524344
<i>Rhinichthys umatilla</i>	Canada: British Columbia: Similkameen river	tissue UOG:Bio:BCF-0662-2	BCF-0662-2	EU524345
<i>Rhinichthys umatilla</i>	Canada: British Columbia: Similkameen river	tissue UOG:Bio:BCF-0662-1	BCF-0662-1	EU524346
<i>Richardsonius balteatus</i>	Canada: British Columbia: Fraser river	tissue UOG:Bio:BCF-0685-5	BCF-0685-5	EU524347
<i>Richardsonius balteatus</i>	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	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological	ROM:Ich:BCF-0086-2	BCF-0086-2	EU525152
Tinca tinca	Canada: Quebec: Riviere Richelieu	tissue	UOG:Bio:BCF-0238-1	BCF-0238-1	EU524390
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0238-19	BCF-0238-19	EU525153
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0238-18	BCF-0238-18	EU525154
Tinca tinca	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0238-17	BCF-0238-17	EU525155
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	EU525158
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	Canada: Ontario: Stony Lake	morphological	ROM:Ich:BCF-0448-10	BCF-0448-10	EU524594
Esox masquinongy	Canada: Ontario: Muskie Lake	morphological	ROM:Ich:BCF-0448-1	BCF-0448-1	EU524595

Esox masquinongy	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0329-1	BCF-0329-1	EU524596
Esox masquinongy	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0039-2	BCF-0039-2	EU524597
Esox masquinongy	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0039-1	BCF-0039-1	EU524598
Esox masquinongy	Canada: Ontario: Georgian Bay	morphological ROM:Ich:BCF-0500-1	BCF-0500-1	EU524599
Esox masquinongy	Canada: Ontario: Stony Lake	morphological ROM:Ich:BCF-0448-9	BCF-0448-9	EU524600
Esox masquinongy	Canada: Ontario: Pigeon Lake	morphological ROM:Ich:BCF-0448-7	BCF-0448-7	EU524601
Esox masquinongy	Canada: Ontario: Chemong Lake	morphological ROM:Ich:BCF-0448-6	BCF-0448-6	EU524602
Esox niger	Canada: Quebec: Lac Stoke	morphological ROM:Ich:BCF-0199-1	BCF-0199-1	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	morphological ROM:Ich:BCF-0589-1	BCF-0589-1	EU524619
Fundulus diaphanus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0349-3	BCF-0349-3	EU524620
Fundulus diaphanus	Canada: Ontario: Fleuve St-Laurent	morphological ROM:Ich:BCF-0349-1	BCF-0349-1	EU524621
Fundulus diaphanus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0221-3	BCF-0221-3	EU524622
Fundulus diaphanus	Canada: Ontario: Lac Opinicon	morphological ROM:Ich:BCF-0221-2	BCF-0221-2	EU524623
Fundulus diaphanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0129-3	BCF-0129-3	EU524624
Fundulus diaphanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0129-2	BCF-0129-2	EU524625
Fundulus diaphanus	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	tissue UOG:Bio:BCF-0129-1	BCF-0129-1	EU524626
Fundulus heteroclitus	Canada: Nova Scotia: La Have river	tissue UOG:Bio:BCF-0588-6	BCF-0588-6	EU524627
Fundulus heteroclitus	Canada: Nova Scotia: La Have river	tissue UOG:Bio:BCF-0588-5	BCF-0588-5	EU524628
Fundulus heteroclitus	Canada: Nova Scotia: La Have river	tissue UOG:Bio:BCF-0588-4	BCF-0588-4	EU524629
Fundulus heteroclitus	Canada: Nova Scotia: La Have river	tissue UOG:Bio:BCF-0588-2	BCF-0588-2	EU524630
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	morphological ROM:Ich:BCF-0758-7	BCF-0758-7	EU524059
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	morphological ROM:Ich:BCF-0758-6	BCF-0758-6	EU524060
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	morphological ROM:Ich:BCF-0758-5	BCF-0758-5	EU524061
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	morphological ROM:Ich:BCF-0758-4	BCF-0758-4	EU524062
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	morphological ROM:Ich:BCF-0758-3	BCF-0758-3	EU524063
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	morphological ROM:Ich:BCF-0758-2	BCF-0758-2	EU524064
Fundulus notatus	Canada: Ontario: Sydenham River, Black creek	morphological ROM:Ich:BCF-0758-1	BCF-0758-1	EU524065
Microgadus tomcod	Canada: Quebec: Saint Laurent River	morphological ROM:Ich:BCF-0883-1	BCF-0883-1	EU524129
Microgadus tomcod	United States: Kansas:	tissue UOG:Bio:BCF-0706-1	BCF-0706-1	EU524130
Apeltes quadracus	Canada: Quebec: Trois-Pistol, Saint-Laurent	morphological ROM:Ich:BCF-0139-1	BCF-0139-1	EU523919
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	morphological ROM:Ich:BCF-0139-5	BCF-0139-5	EU524443
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	morphological ROM:Ich:BCF-0139-4	BCF-0139-4	EU524444
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	morphological ROM:Ich:BCF-0139-3	BCF-0139-3	EU524445
Apeltes quadracus	Canada: Quebec: Fleuve St-Laurent, Trois-Pistol	morphological ROM:Ich:BCF-0139-2	BCF-0139-2	EU524446
Culaea inconstans	Canada: Quebec: Riviere Cap-Rouge	morphological ROM:Ich:BCF-0204-1	BCF-0204-1	EU524003
Culaea inconstans	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0436-2	BCF-0436-2	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	morphological ROM:Ich:BCF-0296-3	BCF-0296-3	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	morphological ROM:Ich:BCF-0135-2	BCF-0135-2	EU524634
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Cap-Rouge	morphological ROM:Ich:BCF-0135-1	BCF-0135-1	EU524635
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0134-4	BCF-0134-4	EU524636
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0134-3	BCF-0134-3	EU524637

Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0134-2	BCF-0134-2	EU524638
Gasterosteus aculeatus	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological ROM:Ich:BCF-0134-1	BCF-0134-1	EU524639
Gasterosteus wheatlandi	Canada: Quebec: Ile Verte, Saint-Laurent	morphological ROM:Ich:BCF-0136-1	BCF-0136-1	EU524067
Gasterosteus wheatlandi	Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0136-5	BCF-0136-5	EU524640
Gasterosteus wheatlandi	Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0136-3	BCF-0136-3	EU524641
Gasterosteus wheatlandi	Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0136-2	BCF-0136-2	EU524642
Pungitius pungitius	Canada: British Columbia: Baffin island	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	morphological ROM:Ich:BCF-0334-1	BCF-0334-1	EU525107
Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological ROM:Ich:BCF-0138-1	BCF-0138-1	EU525108
Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0137-5	BCF-0137-5	EU525109
Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0137-4	BCF-0137-4	EU525110
Pungitius pungitius	Canada: Quebec: Fleuve St-Laurent, Ile Verte	morphological ROM:Ich:BCF-0137-3	BCF-0137-3	EU525111
Pungitius pungitius	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: Saint Clair River, McLeod creek	morphological ROM:Ich:BCF-0761-1	BCF-0761-1	EU524155
Neogobius melanostomus	Canada: Quebec: Fleuve Saint-Laurent	morphological ROM:Ich:BCF-0196-1	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	BCF-0196-2	EU524920
Proterorhinus marmoratus	Canada: Ontario: Rose Beach, Lac Erie	tissue UOG:Bio:BCF-0815-5	BCF-0815-5	EU524305
Proterorhinus marmoratus	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: 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	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	BCF-0021-2	EU524656
Hiodon tergisus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	tissue UOG:Bio:BCF-0021-1	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

Ameiurus nebulosus	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0121-1	BCF-0121-1	EU524428
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
Noturus gyrinus	Canada: Ontario: Twenty Mile Creek	morphological	ROM:Ich:BCF-0453-1	BCF-0453-1	EU525052
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 stigmatosus	Canada: Ontario: Detroit River	morphological	ROM:Ich:BCF-0493-2	BCF-0493-2	EU525054
Noturus stigmatosus	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



<i>Spirinchus thaleichthys</i>	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0657-3	BCF-0657-3	EU524384
<i>Spirinchus thaleichthys</i>	Canada: British Columbia: Fraser river	tissue	UOG:Bio:BCF-0657-1	BCF-0657-1	EU524385
<i>Thaleichthys pacificus</i>	Canada: British Columbia: Vancouver island	tissue	UOG:Bio:BCF-0655-4	BCF-0655-4	EU524386
<i>Thaleichthys pacificus</i>	Canada: British Columbia: Vancouver island	tissue	UOG:Bio:BCF-0655-3	BCF-0655-3	EU524387
<i>Thaleichthys pacificus</i>	Canada: British Columbia: Vancouver island	tissue	UOG:Bio:BCF-0655-2	BCF-0655-2	EU524388
<i>Thaleichthys pacificus</i>	United States: Washington: Columbia river	tissue	UOG:Bio:BCF-0654-1	BCF-0654-1	EU524389
<i>Morone americana</i>	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0503-3	BCF-0503-3	BCF-0503-3	EU524133
<i>Morone americana</i>	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0503-2	BCF-0503-2	BCF-0503-2	EU524134
<i>Morone americana</i>	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0503-1	BCF-0503-1	BCF-0503-1	EU524135
<i>Morone americana</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0147-2	BCF-0147-2	EU524136
<i>Morone americana</i>	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	tissue	UOG:Bio:BCF-0147-1	BCF-0147-1	EU524137
<i>Morone americana</i>	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0146-3	BCF-0146-3	EU524138
<i>Morone americana</i>	Canada: Quebec: Saint Lawrence River St-Nicolas	tissue	UOG:Bio:BCF-0146-1	BCF-0146-1	EU524139
<i>Morone chrysops</i>	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0504-3	BCF-0504-3	BCF-0504-3	EU524140
<i>Morone chrysops</i>	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0504-2	BCF-0504-2	BCF-0504-2	EU524141
<i>Morone chrysops</i>	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0504-1	BCF-0504-1	BCF-0504-1	EU524142
<i>Morone saxatilis</i>	Canada: Quebec: Pisciculture de Baldwin	tissue	UOG:Bio:BCF-0149-7	BCF-0149-7	EU524143
<i>Morone saxatilis</i>	Canada: Quebec: Pisciculture de Baldwin	tissue	UOG:Bio:BCF-0149-6	BCF-0149-6	EU524144
<i>Morone saxatilis</i>	Canada: Quebec: Pisciculture de Baldwin	tissue	UOG:Bio:BCF-0149-5	BCF-0149-5	EU524145
<i>Ammocrypta pellucida</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-6	BCF-0391-6	BCF-0391-6	EU523911
<i>Ammocrypta pellucida</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-5	BCF-0391-5	BCF-0391-5	EU523912
<i>Ammocrypta pellucida</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-4	BCF-0391-4	BCF-0391-4	EU523913
<i>Ammocrypta pellucida</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-2	BCF-0391-2	BCF-0391-2	EU523914
<i>Ammocrypta pellucida</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0391-1	BCF-0391-1	BCF-0391-1	EU523915
<i>Ammocrypta pellucida</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Pierre	morphological ROM:Ich:BCF-0182-2	BCF-0182-2	BCF-0182-2	EU523916
<i>Ammocrypta pellucida</i>	Canada: Quebec: Lac Saint-Pierre, Pointe Yamachiche	morphological ROM:Ich:BCF-0182-1	BCF-0182-1	BCF-0182-1	EU523917
<i>Etheostoma blennioides</i>	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0769-1	BCF-0769-1	BCF-0769-1	EU524013
<i>Etheostoma blennioides</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-6	BCF-0392-6	BCF-0392-6	EU524014
<i>Etheostoma blennioides</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-5	BCF-0392-5	BCF-0392-5	EU524015
<i>Etheostoma blennioides</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-4	BCF-0392-4	BCF-0392-4	EU524016
<i>Etheostoma blennioides</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-3	BCF-0392-3	BCF-0392-3	EU524017
<i>Etheostoma blennioides</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-2	BCF-0392-2	BCF-0392-2	EU524018
<i>Etheostoma blennioides</i>	Canada: Ontario: Grand River	morphological ROM:Ich:BCF-0392-1	BCF-0392-1	BCF-0392-1	EU524019
<i>Etheostoma caeruleum</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0771-10	BCF-0771-10	BCF-0771-10	EU524020
<i>Etheostoma caeruleum</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0771-1	BCF-0771-1	BCF-0771-1	EU524021
<i>Etheostoma caeruleum</i>	Canada: Ontario: Sauble River, Georgian Bay	morphological ROM:Ich:BCF-0757-3	BCF-0757-3	BCF-0757-3	EU524022
<i>Etheostoma caeruleum</i>	Canada: Ontario: Sauble River, Georgian Bay	morphological ROM:Ich:BCF-0757-2	BCF-0757-2	BCF-0757-2	EU524023
<i>Etheostoma exile</i>	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0441-4	BCF-0441-4	BCF-0441-4	EU524024
<i>Etheostoma exile</i>	Canada: Ontario: Wanapitei River	morphological ROM:Ich:BCF-0441-3	BCF-0441-3	BCF-0441-3	EU524025
<i>Etheostoma exile</i>	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0441-2	BCF-0441-2	BCF-0441-2	EU524026
<i>Etheostoma exile</i>	Canada: Ontario: Credit River	morphological ROM:Ich:BCF-0441-1	BCF-0441-1	BCF-0441-1	EU524027
<i>Etheostoma exile</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0181-3	BCF-0181-3	BCF-0181-3	EU524028
<i>Etheostoma exile</i>	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0181-2	BCF-0181-2	BCF-0181-2	EU524029
<i>Etheostoma exile</i>	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological ROM:Ich:BCF-0181-1	BCF-0181-1	BCF-0181-1	EU524030
<i>Etheostoma flabellare</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0772-3	BCF-0772-3	BCF-0772-3	EU524031
<i>Etheostoma flabellare</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0772-2	BCF-0772-2	BCF-0772-2	EU524032
<i>Etheostoma flabellare</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0772-10	BCF-0772-10	BCF-0772-10	EU524033
<i>Etheostoma flabellare</i>	Canada: Ontario: Maitland River	morphological ROM:Ich:BCF-0772-1	BCF-0772-1	BCF-0772-1	EU524034
<i>Etheostoma flabellare</i>	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological ROM:Ich:BCF-0178-4	BCF-0178-4	BCF-0178-4	EU524035
<i>Etheostoma flabellare</i>	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological ROM:Ich:BCF-0178-3	BCF-0178-3	BCF-0178-3	EU524036
<i>Etheostoma flabellare</i>	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological ROM:Ich:BCF-0178-2	BCF-0178-2	BCF-0178-2	EU524037
<i>Etheostoma flabellare</i>	Canada: Quebec: Riviere du Sud	morphological ROM:Ich:BCF-0178-1	BCF-0178-1	BCF-0178-1	EU524038
<i>Etheostoma microperca</i>	Canada: Ontario: Miller Lake, Georgian Bay	morphological ROM:Ich:BCF-0764-7	BCF-0764-7	BCF-0764-7	EU524039
<i>Etheostoma microperca</i>	Canada: Ontario: Miller Lake, Georgian Bay	morphological ROM:Ich:BCF-0764-6	BCF-0764-6	BCF-0764-6	EU524040
<i>Etheostoma microperca</i>	Canada: Ontario: Miller Lake, Georgian Bay	morphological ROM:Ich:BCF-0764-4	BCF-0764-4	BCF-0764-4	EU524041
<i>Etheostoma microperca</i>	Canada: Ontario: Miller Lake, Georgian Bay	morphological ROM:Ich:BCF-0764-3	BCF-0764-3	BCF-0764-3	EU524042
<i>Etheostoma microperca</i>	Canada: Ontario: Miller Lake, Georgian Bay	morphological ROM:Ich:BCF-0764-2	BCF-0764-2	BCF-0764-2	EU524043
<i>Etheostoma microperca</i>	Canada: Ontario: Miller Lake, Georgian Bay	morphological ROM:Ich:BCF-0764-1	BCF-0764-1	BCF-0764-1	EU524044
<i>Etheostoma nigrum</i>	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0573-2	BCF-0573-2	BCF-0573-2	EU524045
<i>Etheostoma nigrum</i>	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0573-1	BCF-0573-1	BCF-0573-1	EU524046
<i>Etheostoma nigrum</i>	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0293-2	BCF-0293-2	BCF-0293-2	EU524047
<i>Etheostoma nigrum</i>	Canada: Quebec: Fleuve St-Laurent, riviere St-Jean	morphological ROM:Ich:BCF-0293-1	BCF-0293-1	BCF-0293-1	EU524048
<i>Etheostoma nigrum</i>	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological ROM:Ich:BCF-0242-3	BCF-0242-3	BCF-0242-3	EU524049

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: Gagetown	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-0446-12	EU524246
Percina caprodes	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0373-5	BCF-0373-5	EU524247
Percina caprodes	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0373-4	BCF-0373-4	EU524248
Percina caprodes	Canada: Quebec: Riviere Batiscan	morphological ROM:Ich:BCF-0205-1	BCF-0205-1	EU524249
Percina copelandi	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0241-3	BCF-0241-3	EU524250
Percina copelandi	Canada: Quebec: Fleuve St-Laurent, riviere Becancour	morphological ROM:Ich:BCF-0241-2	BCF-0241-2	EU524251
Percina copelandi	Canada: Quebec: Riviere Becancour	morphological ROM:Ich:BCF-0241-1	BCF-0241-1	EU524252
Percina maculata	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0411-1	BCF-0411-1	EU524253
Percina maculata	Canada: Ontario: Talford creek, Saint Clair River	morphological ROM:Ich:BCF-0768-1	BCF-0768-1	EU524254
Percina maculata	Canada: Ontario: Sydenham River (East)	tissue UOG:Bio:BCF-0509-2	BCF-0509-2	EU524255
Percina maculata	Canada: Ontario: Sydenham River (East)	tissue UOG:Bio:BCF-0509-1	BCF-0509-1	EU524256
Percina maculata	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0370-3	BCF-0370-3	EU524257
Percina maculata	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0370-2	BCF-0370-2	EU524258
Percina maculata	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0370-1	BCF-0370-1	EU524259
Percina shumardi	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0618-1	BCF-0618-1	EU524260
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0318-4	BCF-0318-4	EU524368
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0318-3	BCF-0318-3	EU524369
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	tissue UOG:Bio:BCF-0318-2	BCF-0318-2	EU524370
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0190-4	BCF-0190-4	EU524371
Sander canadensis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue UOG:Bio:BCF-0190-3	BCF-0190-3	EU524372
Sander canadensis	Canada: Quebec: Saint Lawrence River St-Nicolas	tissue UOG:Bio:BCF-0190-1	BCF-0190-1	EU524373
Sander vitreus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0428-4	BCF-0428-4	EU524374
Sander vitreus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0428-2	BCF-0428-2	EU524375
Sander vitreus	Canada: Ontario: Lake Erie	morphological ROM:Ich:BCF-0428-1	BCF-0428-1	EU524376
Sander vitreus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0192-4	BCF-0192-4	EU524377
Sander vitreus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0192-3	BCF-0192-3	EU524378
Sander vitreus	Canada: Quebec: Fleuve St-Laurent, lac St-Louis	morphological ROM:Ich:BCF-0192-2	BCF-0192-2	EU524379
Sander vitreus	Canada: Quebec: Lac Saint-Louis (Fleuve Saint-Laurent)	morphological ROM:Ich:BCF-0192-1	BCF-0192-1	EU524380
Percopsis omiscomaycus	Canada: Ontario: Sydenham River	morphological ROM:Ich:BCF-0422-2	BCF-0422-2	EU524261
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-0371-3	EU524263
Percopsis omiscomaycus	Canada: Ontario: Thames River	morphological ROM:Ich:BCF-0371-2	BCF-0371-2	EU524264
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

Ichthyomyzon fossor	Canada: Ontario: Coldwater Creek, Huron Lake	tissue	UOG:Bio:BCF-0893-3	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	morphological	ROM:Ich:BCF-0555-3	BCF-0555-3	EU524097
Ichthyomyzon unicuspis	Canada: Ontario: Lake Erie	morphological	ROM:Ich:BCF-0555-2	BCF-0555-2	EU524098
Ichthyomyzon unicuspis	Canada: Ontario: Lake Erie	morphological	ROM:Ich:BCF-0555-1	BCF-0555-1	EU524099
Ichthyomyzon unicuspis	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	morphological	ROM:Ich:BCF-0005-4	BCF-0005-4	EU524100
Ichthyomyzon unicuspis	Canada: Quebec: Fleuve St-Laurent, riviere Richelieu	morphological	ROM:Ich:BCF-0005-3	BCF-0005-3	EU524101
Ichthyomyzon unicuspis	Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook	morphological	ROM:Ich:BCF-0004-3	BCF-0004-3	EU524102
Ichthyomyzon unicuspis	Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook	morphological	ROM:Ich:BCF-0004-2	BCF-0004-2	EU524103
Ichthyomyzon unicuspis	Canada: Quebec: Riviere Richelieu, Saint-Ours	morphological	ROM:Ich:BCF-0005-1	BCF-0005-1	EU524104
Ichthyomyzon unicuspis	Canada: Quebec: Ruisseau Hinchinbrook	morphological	ROM:Ich:BCF-0004-1	BCF-0004-1	EU524105
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological	ROM:Ich:BCF-0007-3	BCF-0007-3	EU524109
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological	ROM:Ich:BCF-0007-2	BCF-0007-2	EU524110
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological	ROM:Ich:BCF-0007-1	BCF-0007-1	EU524111
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook	morphological	ROM:Ich:BCF-0003-2	BCF-0003-2	EU524112
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, ruisseau Hinchinbrook	morphological	ROM:Ich:BCF-0003-1	BCF-0003-1	EU524113
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere a la truite	morphological	ROM:Ich:BCF-0002-2	BCF-0002-2	EU524114
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere a la truite	morphological	ROM:Ich:BCF-0002-1	BCF-0002-1	EU524115
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological	ROM:Ich:BCF-0001-3	BCF-0001-3	EU524116
Lampetra appendix	Canada: Quebec: Fleuve St-Laurent, riviere du Sud	morphological	ROM:Ich:BCF-0001-2	BCF-0001-2	EU524117
Lampetra appendix	Canada: Quebec: Riviere du Sud	morphological	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	morphological	ROM:Ich:BCF-0006-3	BCF-0006-3	EU524271
Petromyzon marinus	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological	ROM:Ich:BCF-0006-2	BCF-0006-2	EU524272
Petromyzon marinus	Canada: Quebec: Fleuve St-Laurent, riviere Ste-Marguerite	morphological	ROM:Ich:BCF-0006-1	BCF-0006-1	EU524273
Platichthys flesus	Canada: Ontario: Lake Erie	morphological	ROM:Ich:BCF-0527-1	BCF-0527-1	EU524278
Platichthys flesus	Canada: Ontario: Lake Erie	morphological	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 clupearformis	Canada: British Columbia: Swan lake	tissue	UOG:Bio:BCF-0627-3	BCF-0627-3	EU523952
Coregonus clupearformis	Canada: British Columbia: Swan lake	tissue	UOG:Bio:BCF-0627-2	BCF-0627-2	EU523953
Coregonus clupearformis	Canada: British Columbia: Swan lake	tissue	UOG:Bio:BCF-0627-1	BCF-0627-1	EU523954
Coregonus clupearformis	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0590-3	BCF-0590-3	EU523955
Coregonus clupearformis	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0590-2	BCF-0590-2	EU523956
Coregonus clupearformis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0269-3	BCF-0269-3	EU523957
Coregonus clupearformis	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	tissue	UOG:Bio:BCF-0269-2	BCF-0269-2	EU523958
Coregonus clupearformis	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	BCF-0570-6	EU523960
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-12	BCF-0570-12	EU523961
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-11	BCF-0570-11	EU523962
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-10	BCF-0570-10	EU523963
Coregonus hoyi	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0570-1	BCF-0570-1	EU523964
Coregonus huntsmani	Canada: New Brunswick:		ACL12	ACL12	EU524489
Coregonus kiyi	Canada: Ontario: Lake Superior	tissue	UOG:Bio:BCF-0613-2	BCF-0613-2	EU523965
Coregonus laurettae	United States: Alaska: Yukon river	tissue	UOG:Bio:BCF-0709-10	BCF-0709-10	EU523966
Coregonus laurettae	United States: Alaska: Yukon river	tissue	UOG:Bio:BCF-0709-1	BCF-0709-1	EU523967
Coregonus laurettae	Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0632-3	BCF-0632-3	EU523968
Coregonus laurettae	Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0632-2	BCF-0632-2	EU523969
Coregonus laurettae	Canada: Yukon Territory: Tanana river	tissue	UOG:Bio:BCF-0632-1	BCF-0632-1	EU523970
Coregonus laurettae	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0594-3	BCF-0594-3	EU523971
Coregonus laurettae	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0594-1	BCF-0594-1	EU523972
Coregonus nasus	United States: Alaska: Selawik river, Kotzebve sound	tissue	UOG:Bio:BCF-0710-10	BCF-0710-10	EU523973

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	BCF-0626-2	EU523976
Coregonus nasus	United States: Alaska: Tanana river	tissue	UOG:Bio:BCF-0626-1	BCF-0626-1	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	EU523979
Coregonus nigripinnis	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0614-2	BCF-0614-2	EU523980
Coregonus nigripinnis	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0614-1	BCF-0614-1	EU523981
Coregonus sardinella	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0567-11	BCF-0567-11	EU523982
Coregonus sardinella	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0567-10	BCF-0567-10	EU523983
Coregonus sardinella	Canada: British Columbia: Atlin lake	tissue	UOG:Bio:BCF-0631-2	BCF-0631-2	EU523984
Coregonus sardinella	Canada: British Columbia: Atlin lake	tissue	UOG:Bio:BCF-0631-1	BCF-0631-1	EU523985
Coregonus sardinella	Canada: Yukon Territory: 6 miles river	tissue	UOG:Bio:BCF-0630-2	BCF-0630-2	EU523986
Coregonus sardinella	Canada: Yukon Territory: Yukon river	tissue	UOG:Bio:BCF-0593-1	BCF-0593-1	EU523987
Coregonus zenithicus	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0615-2	BCF-0615-2	EU523988
Coregonus zenithicus	Canada: Ontario: Lake Nipigon	tissue	UOG:Bio:BCF-0615-1	BCF-0615-1	EU523989
Coregonus zenithicus	Canada: Ontario: Lake Huron	tissue	UOG:Bio:BCF-0567-12	BCF-0567-12	EU523990
Oncorhynchus clarki	Canada: British Columbia: Parc Ouest	tissue	UOG:Bio:BCF-0604-2	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	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 gorboscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-8	BCF-0818-8	EU524202
Oncorhynchus gorboscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-7	BCF-0818-7	EU524203
Oncorhynchus gorboscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-6	BCF-0818-6	EU524204
Oncorhynchus gorboscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-5	BCF-0818-5	EU524205
Oncorhynchus gorboscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-4	BCF-0818-4	EU524206
Oncorhynchus gorboscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-3	BCF-0818-3	EU524207
Oncorhynchus gorboscha	Canada: British Columbia: Indian River	tissue	UOG:Bio:BCF-0818-2	BCF-0818-2	EU524208
Oncorhynchus gorboscha	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	BCF-0819-8	EU524210
Oncorhynchus kisutch	Canada: British Columbia: Big Qualicum	tissue	UOG:Bio:BCF-0819-7	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	morphological	ROM:Ich:BCF-0033-2	BCF-0033-2	EU524221
Oncorhynchus mykiss	Canada: Quebec: Fleuve St-Laurent, riviere St-Nicolas	morphological	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

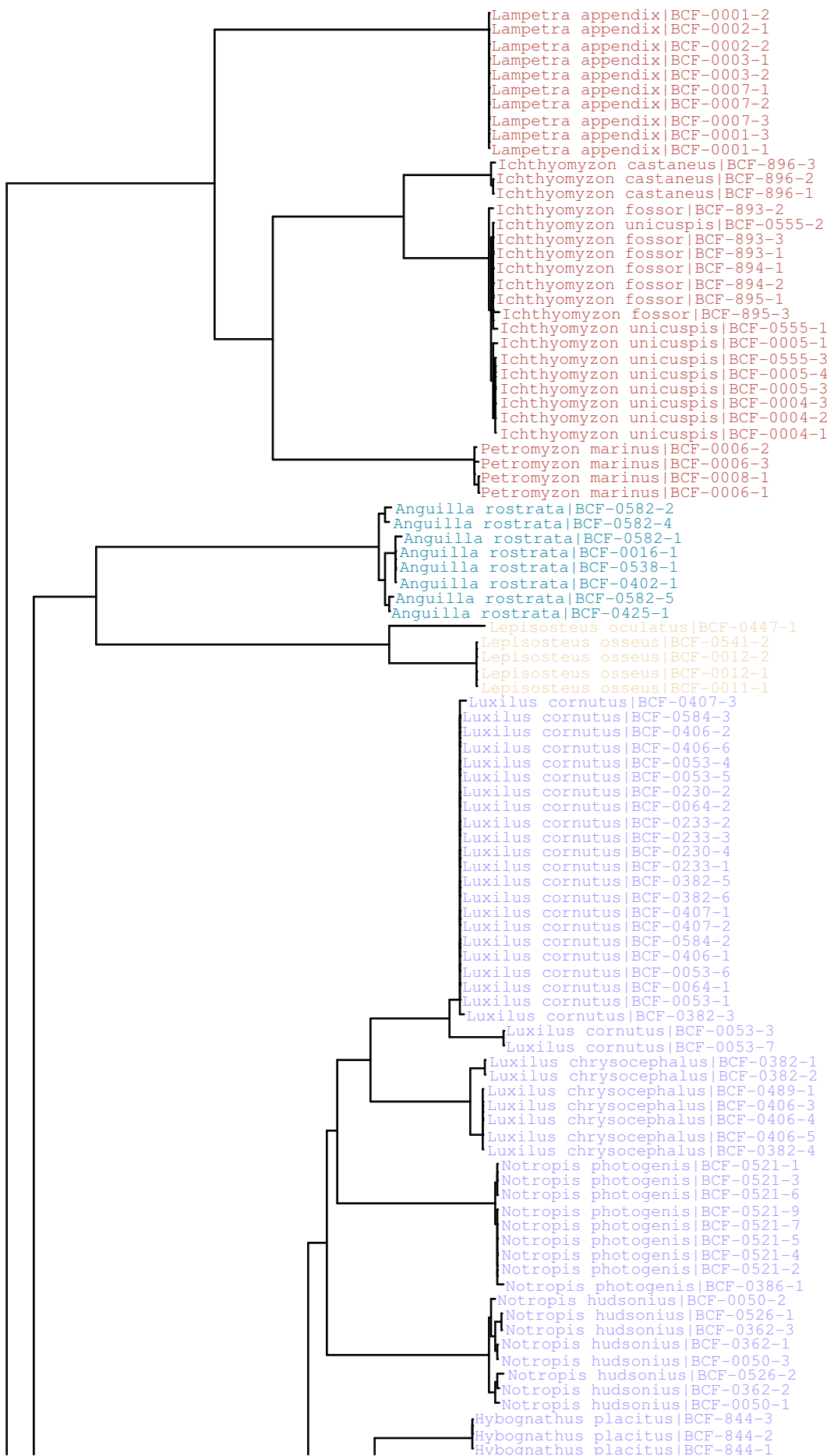
Oncorhynchus tshawytscha	Canada: British Columbia: Big Qualicum River	tissue	UOG:Bio:BCF-0813-4	BCF-0813-4	EU524234
Prosopium coulterii	Canada: British Columbia:	tissue	ACL186	ACL186	EU525103
Prosopium coulterii	Canada: British Columbia:	tissue	ACL34	ACL34	EU525104
Prosopium cylindraceum	Canada: British 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
Prosopium williamsoni	Canada: British Columbia: Omenica river	tissue	UOG:Bio:BCF-0688-1	BCF-0688-1	EU522438
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Ouasiemscas	tissue	UOG:Bio:BCF-0607-3	BCF-0607-3	EU524349
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Ouasiemscas	tissue	UOG:Bio:BCF-0607-1	BCF-0607-1	EU524350
Salmo salar	Canada: Quebec: Fleuve St-Laurent, riviere Metabetchouane	tissue	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	BCF-0612-2	EU524364
Salvelinus confluentus	Canada: Quebec: Parc Ouest, Waterton lake	tissue	UOG:Bio:BCF-0612-1	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	tissue	UOG:Bio:BCF-0638-3	BCF-0638-3	EU522400
Salvelinus confluentus	United States: Washington: Yakima	tissue	UOG:Bio:BCF-0638-2	BCF-0638-2	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	morphological	ROM:Ich:BCF-0031-3	BCF-0031-3	EU522406
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological	ROM:Ich:BCF-0031-2	BCF-0031-2	EU522407
Salvelinus fontinalis	Canada: Quebec: Fleuve St-Laurent, riviere Malbaie	morphological	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	EU522418

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	morphological	ROM:Ich:BCF-0513-3	BCF-0513-3	EU522443
Aplodinotus grunniens	Canada: Ontario: Lake Erie	morphological	ROM:Ich:BCF-0513-2	BCF-0513-2	EU522444
Aplodinotus grunniens	Canada: Ontario: Lake Erie	morphological	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	morphological	ROM:Ich:BCF-0705-2	BCF-0705-2	EU524007
Dallia pectoralis	United States: Alaska: Spring creek, Kenai pennin	morphological	ROM:Ich:BCF-0705-1	BCF-0705-1	EU524008
Umbra limi	Canada: Ontario: Tea Creek	morphological	ROM:Ich:BCF-0433-3	BCF-0433-3	EU522446
Umbra limi	Canada: Ontario: Tea Creek	morphological	ROM:Ich:BCF-0433-2	BCF-0433-2	EU522447
Umbra limi	Canada: Ontario: Tea Creek	morphological	ROM:Ich:BCF-0433-1	BCF-0433-1	EU522448
Umbra limi	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological	ROM:Ich:BCF-0036-3	BCF-0036-3	EU522449
Umbra limi	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological	ROM:Ich:BCF-0036-2	BCF-0036-2	EU522450
Umbra limi	Canada: Quebec: Fleuve St-Laurent, Lac St-Pierre	morphological	ROM:Ich:BCF-0036-1	BCF-0036-1	EU522451
Umbra limi	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological	ROM:Ich:BCF-0034-3	BCF-0034-3	EU522452
Umbra limi	Canada: Quebec: Fleuve St-Laurent, lac St-Paul	morphological	ROM:Ich:BCF-0034-2	BCF-0034-2	EU522453
Umbra limi	Canada: Quebec: Lac Saint-Paul	morphological	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

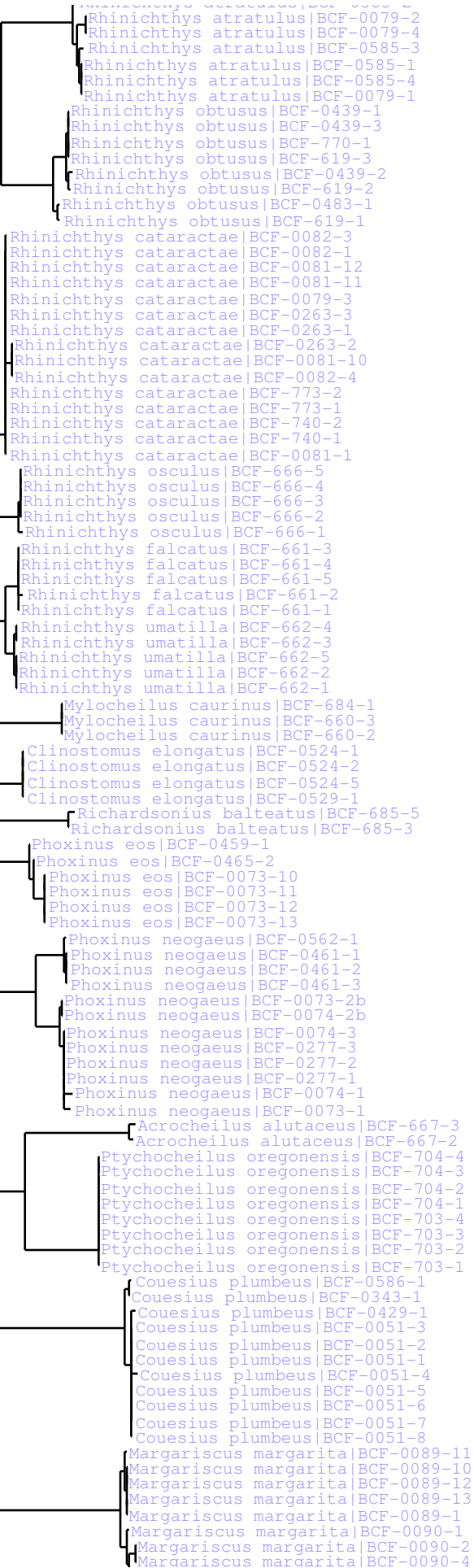
2 3/4





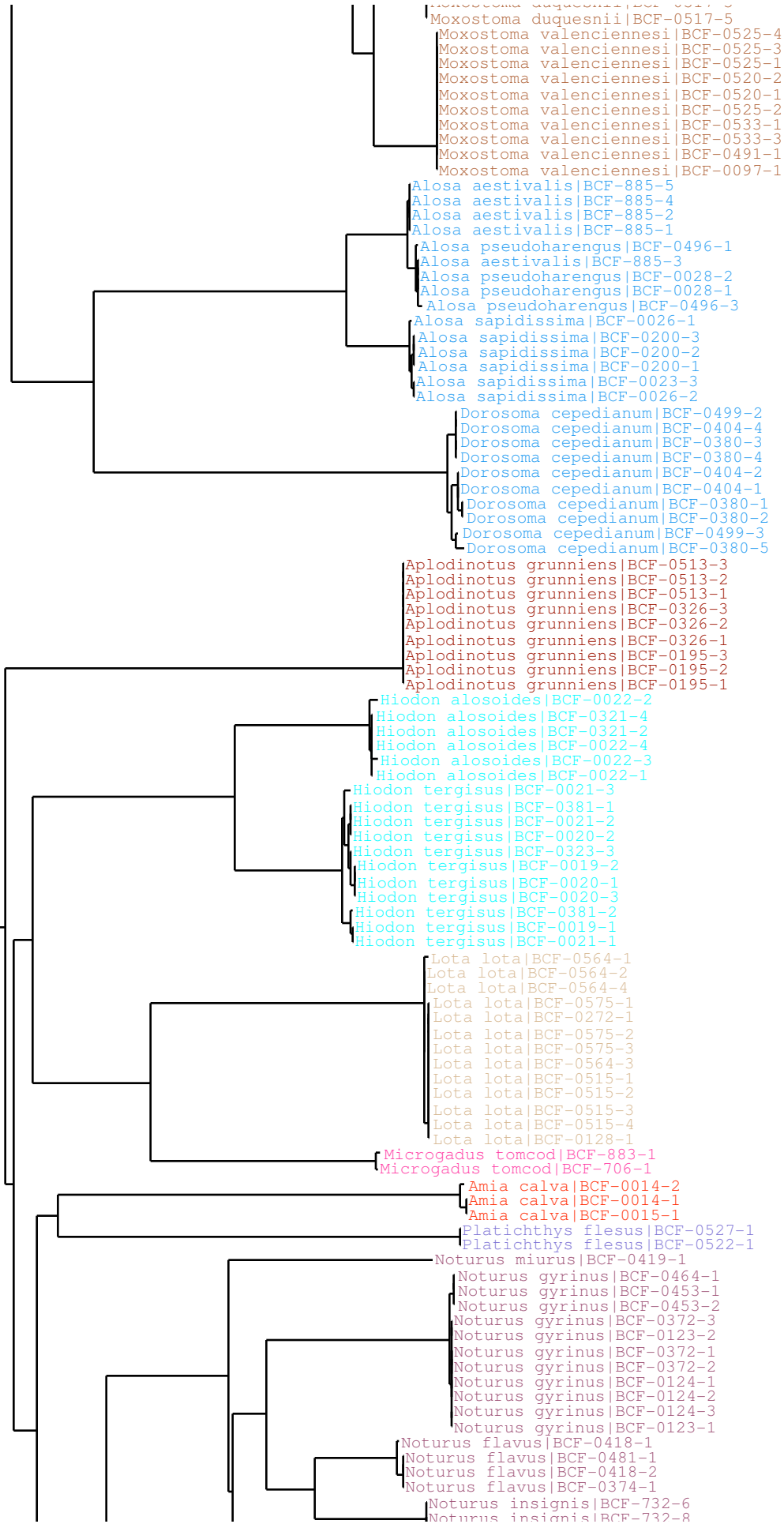
Hybognathus placitus|BCF-844-3  
 Hybognathus placitus|BCF-844-2  
 Hybognathus placitus|BCF-844-1  
 Hybognathus argyritis|BCF-841-5  
 Hybognathus argyritis|BCF-841-3  
 Hybognathus argyritis|BCF-841-7  
 Hybognathus argyritis|BCF-841-6  
 Hybognathus argyritis|BCF-841-4  
 Hybognathus argyritis|BCF-841-2  
 Hybognathus argyritis|BCF-841-1  
 Hybognathus hankinsoni|BCF-698-2  
 Hybognathus hankinsoni|BCF-698-5  
 Hybognathus hankinsoni|BCF-698-4  
 Hybognathus hankinsoni|BCF-698-3  
 Hybognathus hankinsoni|BCF-842-2  
 Hybognathus hankinsoni|BCF-842-1  
 Hybognathus hankinsoni|BCF-0053-2  
 Hybognathus regius|BCF-0054-1  
 Hybognathus regius|BCF-0055-1  
 Hybognathus regius|BCF-0054-7  
 Hybognathus regius|BCF-0054-2  
 Hybognathus regius|BCF-0054-3  
 Hybognathus regius|BCF-0054-4  
 Hybognathus regius|BCF-0054-6  
 Notropis heterodon|BCF-0066-2  
 Notropis heterodon|BCF-0066-3  
 Notropis heterodon|BCF-0507-1  
 Notropis heterodon|BCF-0507-2  
 Notropis heterodon|BCF-0507-3  
 Notropis heterodon|BCF-0507-4  
 Notropis heterodon|BCF-0352-1  
 Notropis heterodon|BCF-0352-2  
 Notropis heterodon|BCF-0352-3  
 Notropis heterodon|BCF-0352-4  
 Notropis heterodon|BCF-0352-5  
 Notropis heterodon|BCF-0066-1  
 Notropis stramineus|BCF-0361-10  
 Notropis stramineus|BCF-0361-3  
 Notropis stramineus|BCF-0361-2  
 Notropis stramineus|BCF-0361-1  
 Notropis stramineus|BCF-0361-4  
 Notropis stramineus|BCF-0361-5  
 Notropis stramineus|BCF-0361-6  
 Notropis stramineus|BCF-0361-7  
 Notropis stramineus|BCF-0252-1  
 Notropis stramineus|BCF-0071-2  
 Notropis stramineus|BCF-0072-1  
 Notropis stramineus|BCF-0071-1  
 Notropis anogenus|BCF-760-6  
 Notropis anogenus|BCF-0353-4  
 Notropis anogenus|BCF-0353-3  
 Notropis anogenus|BCF-0353-2  
 Notropis anogenus|BCF-0353-1  
 Notropis anogenus|BCF-0572-4  
 Notropis anogenus|BCF-0572-3  
 Notropis anogenus|BCF-0572-2  
 Notropis anogenus|BCF-0506-4  
 Notropis anogenus|BCF-760-2  
 Notropis anogenus|BCF-0506-2  
 Notropis anogenus|BCF-760-7  
 Notropis anogenus|BCF-760-8  
 Notropis anogenus|BCF-760-5  
 Notropis anogenus|BCF-760-3  
 Notropis anogenus|BCF-760-1  
 Notropis bifrenatus|BCF-0255-3  
 Notropis bifrenatus|BCF-0255-4  
 Notropis bifrenatus|BCF-0255-5  
 Notropis bifrenatus|BCF-0255-6  
 Notropis bifrenatus|BCF-0201-2  
 Notropis bifrenatus|BCF-0201-3  
 Notropis bifrenatus|BCF-0201-4  
 Notropis bifrenatus|BCF-0201-1  
 Notropis bifrenatus|BCF-0255-1  
 Notropis bifrenatus|BCF-0255-2  
 Notropis heterolepis|BCF-0587-1  
 Notropis heterolepis|BCF-0587-2  
 Notropis heterolepis|BCF-0587-3  
 Notropis heterolepis|BCF-0535-1  
 Notropis heterolepis|BCF-0535-2  
 Notropis heterolepis|BCF-0438-1  
 Notropis heterolepis|BCF-0438-2  
 Notropis heterolepis|BCF-0438-3  
 Lythrurus umbratilis|BCF-0408-1  
 Lythrurus umbratilis|BCF-0408-10  
 Lythrurus umbratilis|BCF-0408-4  
 Lythrurus umbratilis|BCF-0408-5  
 Lythrurus umbratilis|BCF-0408-7  
 Lythrurus umbratilis|BCF-0408-8  
 Lythrurus umbratilis|BCF-0408-9  
 Notropis atherinoides|BCF-0322-2  
 Notropis atherinoides|BCF-0366-2  
 Notropis atherinoides|BCF-0062-2  
 Notropis atherinoides|BCF-0256-4  
 Notropis atherinoides|BCF-0366-4  
 Notropis atherinoides|BCF-0366-1  
 Notropis atherinoides|BCF-0062-3  
 Notropis atherinoides|BCF-0256-1  
 Notropis atherinoides|BCF-0366-3  
 Notropis atherinoides|BCF-0256-3  
 Notropis atherinoides|BCF-0322-1

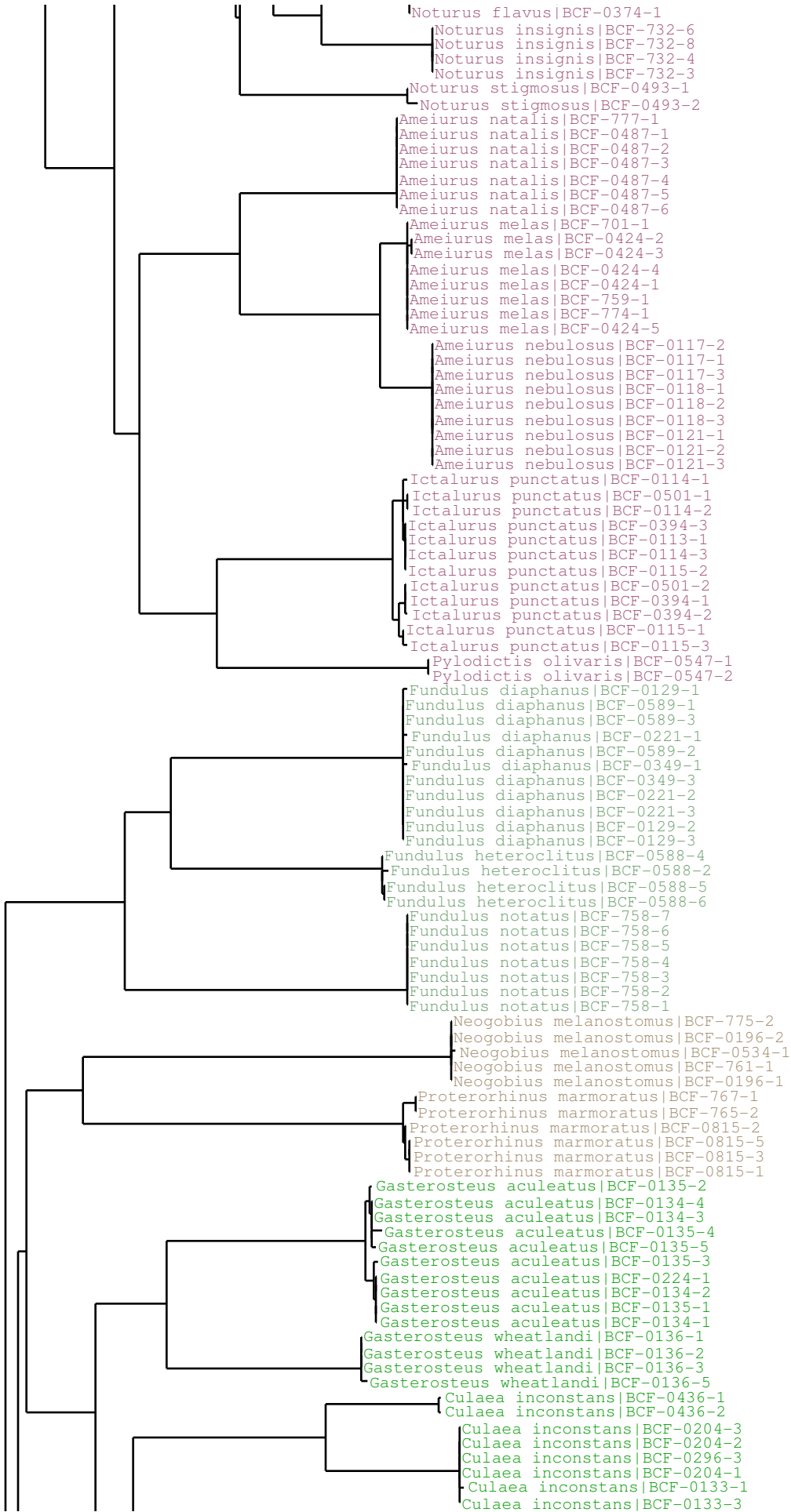
Notropis atherinoides|BCF-0366-3  
 Notropis atherinoides|BCF-0256-3  
 Notropis atherinoides|BCF-0322-1  
 Notropis atherinoides|BCF-0062-1  
 Notropis atherinoides|BCF-0061-1  
 Notropis atherinoides|BCF-0322-3  
 Notropis atherinoides|BCF-0322-4  
 Notropis atherinoides|BCF-0257-1  
 Notropis percobromus|BCF-840-1  
 Notropis rubellus|BCF-0387-4  
 Notropis rubellus|BCF-0387-1  
 Notropis rubellus|BCF-0387-3  
 Notropis rubellus|BCF-0069-10  
 Notropis rubellus|BCF-0069-13  
 Notropis rubellus|BCF-0387-2  
 Notropis rubellus|BCF-0069-2  
 Notropis rubellus|BCF-0069-1  
 Notropis buchanani|BCF-0385-4  
 Notropis buchanani|BCF-0409-2  
 Notropis buchanani|BCF-0409-1  
 Notropis buchanani|BCF-0409-5  
 Notropis buchanani|BCF-0385-2  
 Notropis buchanani|BCF-0385-6  
 Notropis volucellus|BCF-0417-1  
 Notropis volucellus|BCF-0417-2  
 Notropis volucellus|BCF-0417-3  
 Notropis volucellus|BCF-0388-1  
 Notropis volucellus|BCF-0388-2  
 Notropis volucellus|BCF-0388-3  
 Notropis volucellus|BCF-0417-4  
 Notropis buchanani|BCF-0409-3  
 Notropis buchanani|BCF-0409-4  
 Notropis buchanani|BCF-0409-6  
 Notropis buchanani|BCF-0385-3  
 Notropis buchanani|BCF-0385-5  
 Notropis volucellus|BCF-0388-6  
 Notropis volucellus|BCF-0388-4  
 Cyprinella spiloptera|BCF-0369-2  
 Cyprinella spiloptera|BCF-0369-1  
 Cyprinella spiloptera|BCF-0369-3  
 Cyprinella spiloptera|BCF-0379-1  
 Cyprinella spiloptera|BCF-0379-2  
 Cyprinella spiloptera|BCF-0379-3  
 Cyprinella spiloptera|BCF-0289-1  
 Cyprinella spiloptera|BCF-0369-4  
 Cyprinella spiloptera|BCF-0070-1  
 Cyprinella spiloptera|BCF-0070-2  
 Cyprinella spiloptera|BCF-0070-3  
 Cyprinella spiloptera|BCF-0070-4  
 Notropis texanus|BCF-857-1  
 Pimephales notatus|BCF-0401-2  
 Pimephales notatus|BCF-0401-3  
 Pimephales notatus|BCF-0216-2  
 Pimephales notatus|BCF-0216-3  
 Pimephales notatus|BCF-0401-1  
 Pimephales notatus|BCF-0341-3  
 Pimephales notatus|BCF-0075-2  
 Pimephales notatus|BCF-0202-3  
 Pimephales notatus|BCF-0202-2  
 Pimephales notatus|BCF-0202-1  
 Pimephales notatus|BCF-0075-3  
 Pimephales notatus|BCF-0075-1  
 Pimephales promelas|BCF-0462-2  
 Pimephales promelas|BCF-0462-3  
 Pimephales promelas|BCF-0472-1  
 Pimephales promelas|BCF-0472-3  
 Pimephales promelas|BCF-0462-1  
 Pimephales promelas|BCF-0295-2  
 Pimephales promelas|BCF-0265-1  
 Pimephales promelas|BCF-0265-3  
 Pimephales promelas|BCF-0295-3  
 Pimephales promelas|BCF-0078-2  
 Pimephales promelas|BCF-0078-3  
 Pimephales promelas|BCF-0078-1  
 Macrhybopsis storeriana|BCF-0553-2  
 Macrhybopsis storeriana|BCF-0553-1  
 Macrhybopsis storeriana|BCF-0553-5  
 Macrhybopsis storeriana|BCF-0553-4  
 Macrhybopsis storeriana|BCF-0553-3  
 Macrhybopsis storeriana|BCF-0553-6  
 Macrhybopsis storeriana|BCF-0553-7  
 Macrhybopsis storeriana|BCF-0553-8  
 Camptostoma anomalum|BCF-0549-1  
 Nocomis biguttatus|BCF-0563-1  
 Nocomis biguttatus|BCF-0563-2  
 Nocomis biguttatus|BCF-0506-1  
 Nocomis biguttatus|BCF-833-2  
 Nocomis biguttatus|BCF-833-4  
 Nocomis biguttatus|BCF-833-3  
 Nocomis biguttatus|BCF-833-1  
 Nocomis micropogon|BCF-0479-1  
 Nocomis micropogon|BCF-0383-1  
 Exoglossum maxillingua|BCF-0052-3  
 Exoglossum maxillingua|BCF-0052-2  
 Exoglossum maxillingua|BCF-0052-4  
 Exoglossum maxillingua|BCF-0052-1  
 Exoglossum maxillingua|BCF-0052-5  
 Rhinichthys atratulus|BCF-0585-2  
 Rhinichthys atratulus|BCF-0079-2  
 Rhinichthys atratulus|BCF-0079-1  
 Rhinichthys atratulus|BCF-0585-3

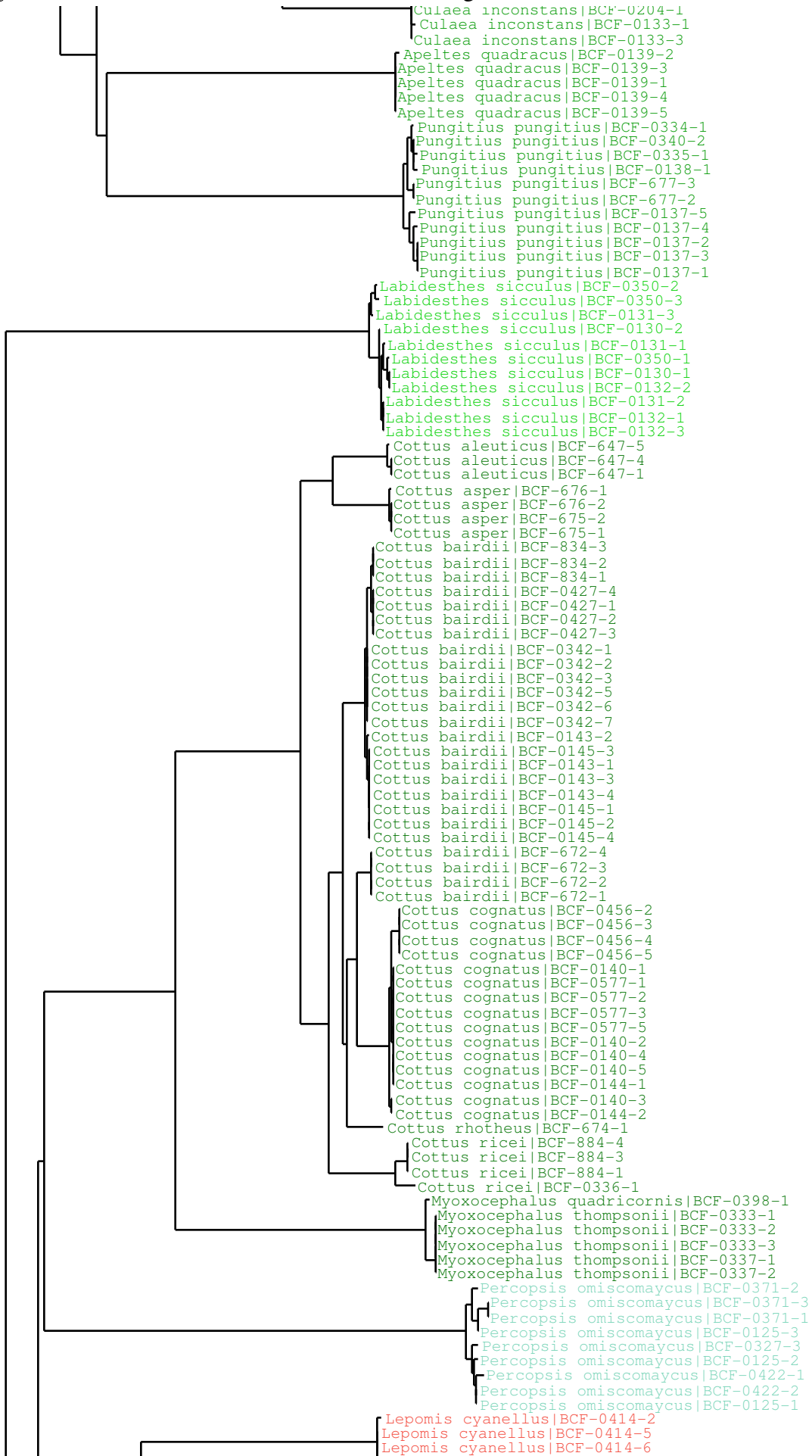


Margariscus margarita|BCF-0090-1  
 Margariscus margarita|BCF-0090-2  
 Margariscus margarita|BCF-0090-4  
 Margariscus margarita|BCF-0458-2  
 Semotilus atromaculatus|BCF-0474-1  
 Semotilus atromaculatus|BCF-0474-2  
 Semotilus atromaculatus|BCF-0474-3  
 Semotilus atromaculatus|BCF-0412-1  
 Semotilus atromaculatus|BCF-0290-2  
 Semotilus atromaculatus|BCF-0229-1  
 Semotilus atromaculatus|BCF-0290-3  
 Semotilus atromaculatus|BCF-0229-2  
 Semotilus atromaculatus|BCF-0229-3  
 Semotilus corporalis|BCF-0086-2  
 Semotilus corporalis|BCF-0528-1  
 Semotilus corporalis|BCF-0528-2  
 Semotilus corporalis|BCF-0528-3  
 Semotilus corporalis|BCF-0086-3  
 Semotilus corporalis|BCF-0086-4  
 Semotilus corporalis|BCF-0088-1  
 Semotilus corporalis|BCF-0088-2  
 Semotilus corporalis|BCF-0254-1  
 Semotilus corporalis|BCF-0086-1  
 Notemigonus crysoleucas|BCF-0354-1  
 Notemigonus crysoleucas|BCF-0367-1  
 Notemigonus crysoleucas|BCF-0367-2  
 Notemigonus crysoleucas|BCF-0583-1  
 Notemigonus crysoleucas|BCF-0583-2  
 Notemigonus crysoleucas|BCF-0583-3  
 Notemigonus crysoleucas|BCF-0583-4  
 Notemigonus crysoleucas|BCF-0056-2  
 Notemigonus crysoleucas|BCF-0058-2  
 Notemigonus crysoleucas|BCF-005810  
 Notemigonus crysoleucas|BCF-0056-1  
 Notemigonus crysoleucas|BCF-0056-3  
 Notemigonus crysoleucas|BCF-0059-1  
 Notemigonus crysoleucas|BCF-0059-2  
 Notemigonus crysoleucas|BCF-0059-3  
 Notemigonus crysoleucas|BCF-0058-1  
 Scardinius erythrophthalmus|BCF-0494-1  
 Scardinius erythrophthalmus|BCF-726-1  
 Tinca tinca|BCF-0238-12  
 Tinca tinca|BCF-0238-15  
 Tinca tinca|BCF-0238-16  
 Tinca tinca|BCF-0238-10  
 Tinca tinca|BCF-0238-11  
 Tinca tinca|BCF-0238-13  
 Tinca tinca|BCF-0238-14  
 Tinca tinca|BCF-0238-17  
 Tinca tinca|BCF-0238-18  
 Tinca tinca|BCF-0238-19  
 Tinca tinca|BCF-0238-1  
 Carassius auratus|BCF-0550-1  
 Carassius auratus|BCF-0550-2  
 Carassius auratus|BCF-0550-3  
 Cyprinus carpio|BCF-0047-2  
 Cyprinus carpio|BCF-0049-1  
 Cyprinus carpio|BCF-0047-3  
 Cyprinus carpio|BCF-0048-3  
 Cyprinus carpio|BCF-0049-2  
 Cyprinus carpio|BCF-0049-3  
 Cyprinus carpio|BCF-0048-1  
 Cyprinus carpio|BCF-0047-1  
 Cyprinus carpio|BCF-0049-4  
 Carpiodes cyprinus|BCF-0551-1  
 Carpiodes cyprinus|BCF-0100-1  
 Carpiodes cyprinus|BCF-0102-1  
 Carpiodes cyprinus|BCF-0100-2  
 Carpiodes cyprinus|BCF-0103-1  
 Carpiodes cyprinus|BCF-0103-2  
 Carpiodes cyprinus|BCF-0103-3  
 Carpiodes cyprinus|BCF-0100-3  
 Carpiodes cyprinus|BCF-0101-1  
 Carpiodes cyprinus|BCF-0101-2  
 Carpiodes cyprinus|BCF-0101-3  
 Carpiodes cyprinus|BCF-0112-3  
 Ictiobus cyprinellus|BCF-0488-1  
 Ictiobus cyprinellus|BCF-0502-1  
 Ictiobus niger|BCF-707-1  
 Erimyzon sucetta|BCF-0514-1  
 Hypentelium nigricans|BCF-0376-5  
 Hypentelium nigricans|BCF-0376-4  
 Hypentelium nigricans|BCF-0376-3  
 Hypentelium nigricans|BCF-0376-1  
 Hypentelium nigricans|BCF-0413-1  
 Hypentelium nigricans|BCF-0393-1  
 Hypentelium nigricans|BCF-0393-2  
 Hypentelium nigricans|BCF-0393-3  
 Hypentelium nigricans|BCF-0393-4  
 Catostomus catostomus|BCF-670-3  
 Catostomus catostomus|BCF-670-2  
 Catostomus catostomus|BCF-670-5  
 Catostomus catostomus|BCF-670-4  
 Catostomus catostomus|BCF-670-1  
 Catostomus catostomus|BCF-0434-4  
 Catostomus catostomus|BCF-0523-1  
 Catostomus catostomus|BCF-0434-1  
 Catostomus catostomus|BCF-0434-2  
 Catostomus catostomus|BCF-0434-3  
 Catostomus catostomus|BCF-0266-2

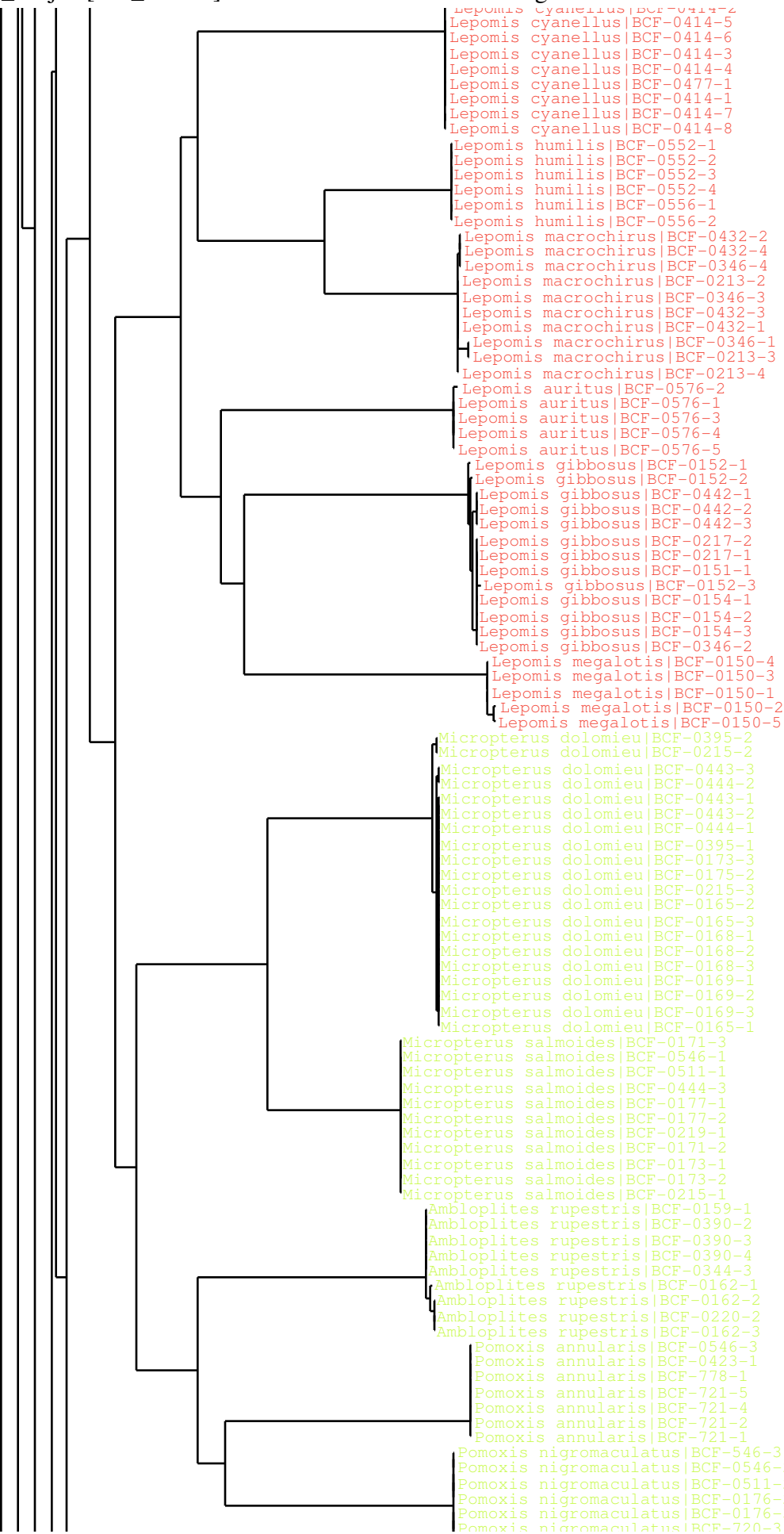
Catostomus catostomus|BCF-0434-2  
 Catostomus catostomus|BCF-0434-3  
 Catostomus catostomus|BCF-0266-2  
 Catostomus catostomus|BCF-0111-2  
 Catostomus catostomus|BCF-0112-1  
 Catostomus catostomus|BCF-0111-1  
 Catostomus catostomus|BCF-0111-3  
 Catostomus catostomus|BCF-0112-2  
 Catostomus commersonii|BCF-0426-1  
 Catostomus commersonii|BCF-0579-1  
 Catostomus commersonii|BCF-0579-2  
 Catostomus commersonii|BCF-0579-3  
 Catostomus commersonii|BCF-0579-4  
 Catostomus commersonii|BCF-0104-2  
 Catostomus commersonii|BCF-0403-1  
 Catostomus commersonii|BCF-0403-2  
 Catostomus commersonii|BCF-0435-2  
 Catostomus commersonii|BCF-0104-3  
 Catostomus commersonii|BCF-0104-4  
 Catostomus commersonii|BCF-0435-1  
 Catostomus commersonii|BCF-0104-1  
 Catostomus commersonii|BCF-0107-3  
 Catostomus macrocheilus|BCF-658-2  
 Catostomus macrocheilus|BCF-658-1  
 Catostomus platyrhynchus|BCF-874-1  
 Catostomus platyrhynchus|BCF-779-5  
 Catostomus platyrhynchus|BCF-779-4  
 Catostomus platyrhynchus|BCF-779-3  
 Catostomus platyrhynchus|BCF-779-2  
 Catostomus platyrhynchus|BCF-779-1  
 Minytrema melanops|BCF-0566-21  
 Minytrema melanops|BCF-0566-23  
 Minytrema melanops|BCF-0566-5  
 Minytrema melanops|BCF-0566-12  
 Minytrema melanops|BCF-0566-16  
 Minytrema melanops|BCF-0566-17  
 Minytrema melanops|BCF-0566-15  
 Moxostoma erythrurum|BCF-0397-4  
 Moxostoma erythrurum|BCF-0416-1  
 Moxostoma erythrurum|BCF-0416-2  
 Moxostoma erythrurum|BCF-0416-3  
 Moxostoma erythrurum|BCF-0416-4  
 Moxostoma erythrurum|BCF-0416-5  
 Moxostoma erythrurum|BCF-0416-6  
 Moxostoma erythrurum|BCF-0397-1  
 Moxostoma erythrurum|BCF-0397-2  
 Moxostoma erythrurum|BCF-0397-3  
 Moxostoma carinatum|BCF-0531-1  
 Moxostoma carinatum|BCF-0098-1  
 Moxostoma carinatum|BCF-0099-4  
 Moxostoma carinatum|BCF-0099-2  
 Moxostoma carinatum|BCF-0445-1  
 Moxostoma carinatum|BCF-0516-2  
 Moxostoma carinatum|BCF-0099-1  
 Moxostoma anisurum|BCF-0094-2  
 Moxostoma anisurum|BCF-0094-3  
 Moxostoma anisurum|BCF-0368-5  
 Moxostoma anisurum|BCF-0094-1  
 Moxostoma anisurum|BCF-0368-1  
 Moxostoma anisurum|BCF-0368-4  
 Moxostoma anisurum|BCF-0415-1  
 Moxostoma anisurum|BCF-0415-3  
 Moxostoma anisurum|BCF-0096-1  
 Moxostoma anisurum|BCF-0096-2  
 Moxostoma anisurum|BCF-0095-1  
 Moxostoma hubbsi|BCF-617-4  
 Moxostoma hubbsi|BCF-617-5  
 Moxostoma hubbsi|BCF-617-2  
 Moxostoma hubbsi|BCF-617-3  
 Moxostoma hubbsi|BCF-617-14  
 Moxostoma hubbsi|BCF-617-15  
 Moxostoma hubbsi|BCF-617-1  
 Moxostoma hubbsi|BCF-617-13  
 Moxostoma hubbsi|BCF-617-6  
 Moxostoma hubbsi|BCF-617-7  
 Moxostoma hubbsi|BCF-617-8  
 Moxostoma hubbsi|BCF-617-9  
 Moxostoma macrolepidotum|BCF-0532-3  
 Moxostoma macrolepidotum|BCF-0490-1  
 Moxostoma macrolepidotum|BCF-0532-4  
 Moxostoma macrolepidotum|BCF-0532-5  
 Moxostoma macrolepidotum|BCF-0377-1  
 Moxostoma macrolepidotum|BCF-0377-2  
 Moxostoma macrolepidotum|BCF-0092-3  
 Moxostoma macrolepidotum|BCF-0516-1  
 Moxostoma macrolepidotum|BCF-0092-1  
 Moxostoma macrolepidotum|BCF-0092-2  
 Moxostoma macrolepidotum|BCF-0093-1  
 Moxostoma macrolepidotum|BCF-0093-2  
 Moxostoma macrolepidotum|BCF-0093-3  
 Moxostoma macrolepidotum|BCF-0091-3  
 Moxostoma macrolepidotum|BCF-0091-4  
 Moxostoma macrolepidotum|BCF-0091-2  
 Moxostoma duquesnii|BCF-0517-6  
 Moxostoma duquesnii|BCF-0517-4  
 Moxostoma duquesnii|BCF-0517-1  
 Moxostoma duquesnii|BCF-0517-2  
 Moxostoma duquesnii|BCF-0517-3  
 Moxostoma duquesnii|BCF-0517-5  
 Moxostoma valenciennesi|BCF-0525-4  
 Moxostoma valenciennesi|BCF-0525-3

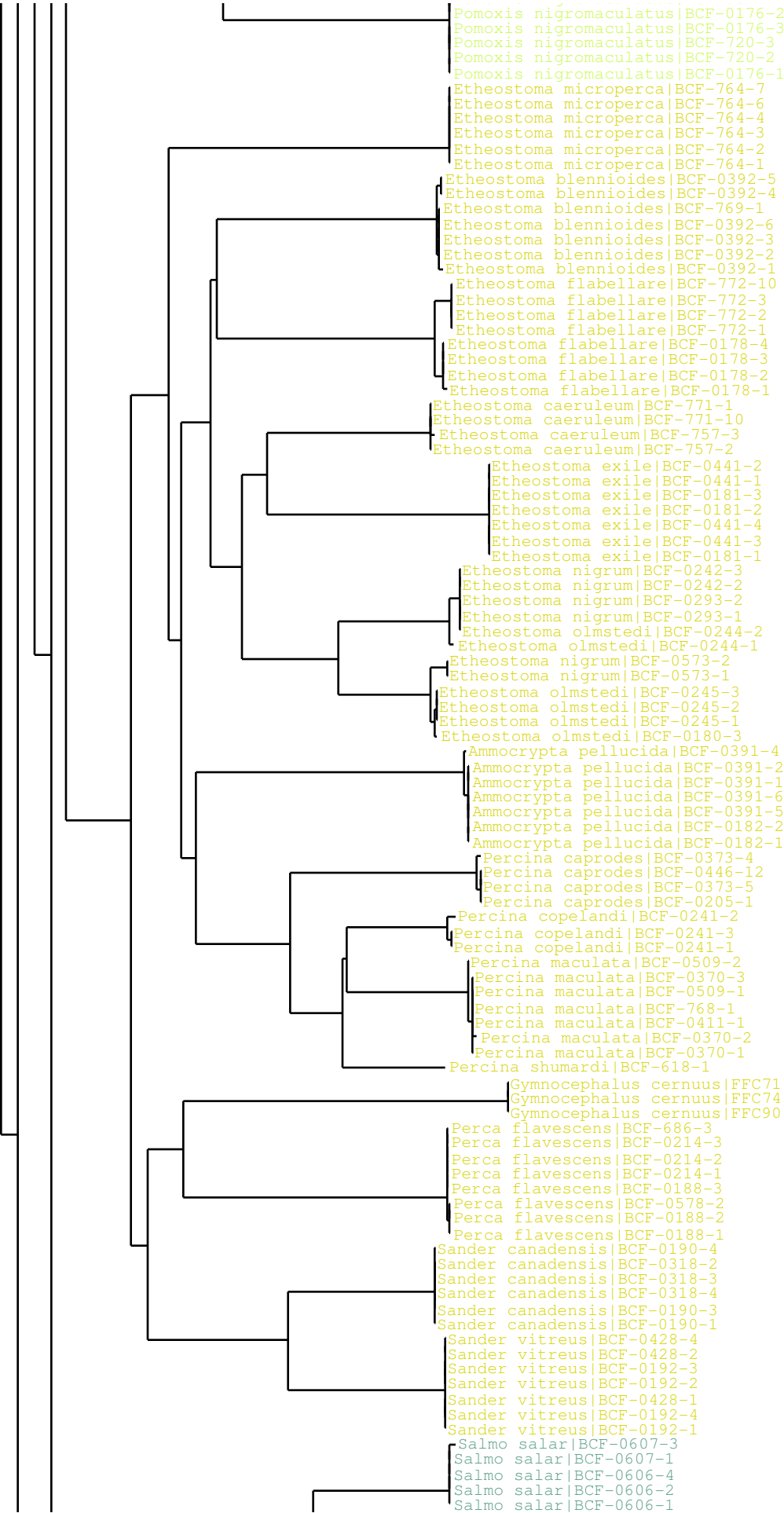


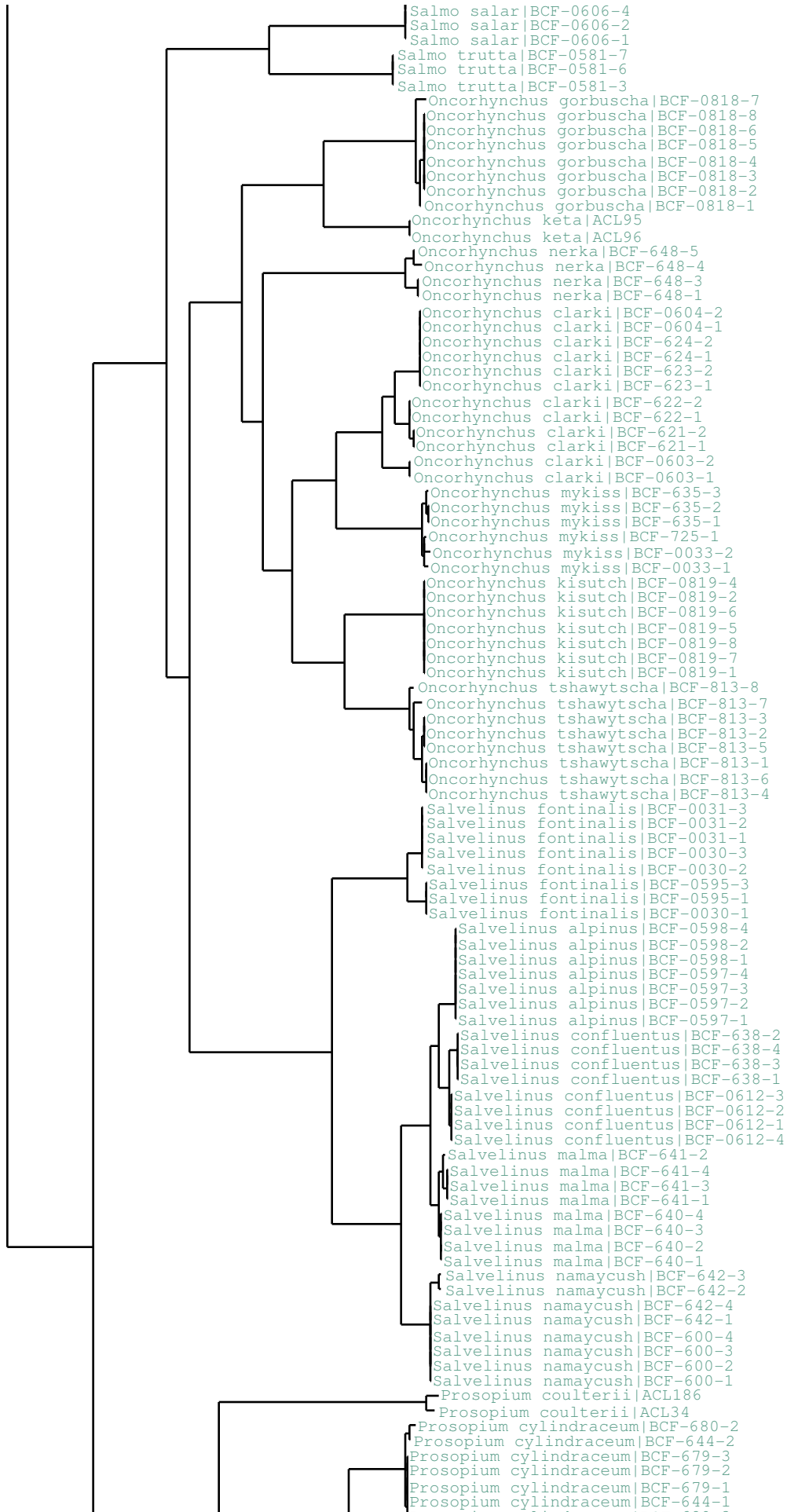












Prosopium cylindraceum|BCF-679-2  
Prosopium cylindraceum|BCF-679-1  
Prosopium cylindraceum|BCF-644-1  
Prosopium cylindraceum|BCF-680-3  
Prosopium cylindraceum|BCF-680-1  
Prosopium cylindraceum|BCF-645-2  
Prosopium williamsoni|BCF-633-2  
Prosopium williamsoni|BCF-633-4  
Prosopium williamsoni|BCF-633-1  
Prosopium williamsoni|BCF-634-4  
Prosopium williamsoni|BCF-634-3  
Prosopium williamsoni|BCF-634-2  
Prosopium williamsoni|BCF-634-1  
Prosopium williamsoni|BCF-633-3  
Prosopium williamsoni|BCF-688-4  
Prosopium williamsoni|BCF-688-3  
Prosopium williamsoni|BCF-688-1  
Coregonus huntsmani|ACL12  
Coregonus clupeaformis|BCF-0590-3  
Coregonus clupeaformis|BCF-627-3  
Coregonus clupeaformis|BCF-627-2  
Coregonus clupeaformis|BCF-627-1  
Coregonus clupeaformis|BCF-0590-2  
Coregonus clupeaformis|BCF-0269-2  
Coregonus clupeaformis|BCF-0269-3  
Coregonus clupeaformis|BCF-0269-1  
Coregonus nasus|BCF-626-2  
Coregonus nasus|BCF-626-3  
Coregonus nasus|BCF-626-1  
Coregonus nasus|BCF-710-10  
Coregonus nasus|BCF-710-1  
Coregonus nasus|BCF-0591-3  
Coregonus nasus|BCF-0591-2  
Coregonus sardinella|BCF-0567-10  
Coregonus sardinella|BCF-0567-11  
Coregonus sardinella|BCF-631-2  
Coregonus sardinella|BCF-631-1  
Coregonus sardinella|BCF-630-2  
Coregonus sardinella|BCF-0593-1  
Coregonus autumnalis|BCF-708-3  
Coregonus autumnalis|BCF-708-5  
Coregonus autumnalis|BCF-708-4  
Coregonus autumnalis|BCF-708-2  
Coregonus autumnalis|BCF-708-10  
Coregonus autumnalis|BCF-708-1  
Coregonus laurettae|BCF-709-1  
Coregonus laurettae|BCF-632-2  
Coregonus laurettae|BCF-0594-3  
Coregonus laurettae|BCF-632-1  
Coregonus laurettae|BCF-709-10  
Coregonus laurettae|BCF-632-3  
Coregonus laurettae|BCF-0594-1  
Coregonus nigripinnis|BCF-0614-1  
Coregonus artedi|BCF-0320-4  
Coregonus artedi|BCF-0320-2  
Coregonus artedi|BCF-0320-1  
Coregonus hoyi|BCF-0570-12  
Coregonus hoyi|BCF-0570-1  
Coregonus hoyi|BCF-0570-10  
Coregonus artedi|BCF-0568-12  
Coregonus artedi|BCF-0568-11  
Coregonus artedi|BCF-0568-1  
Coregonus artedi|BCF-0320-3  
Coregonus hoyi|BCF-0570-6  
Coregonus hoyi|BCF-0570-11  
Coregonus kiyi|BCF-0613-2  
Coregonus nigripinnis|BCF-0614-2  
Coregonus zenithicus|BCF-0615-2  
Coregonus zenithicus|BCF-0615-1  
Coregonus zenithicus|BCF-0567-12  
Coregonus zenithicus|BCF-0567-1  
Stenodus leucichthys|BCF-646-4  
Stenodus leucichthys|BCF-646-3  
Stenodus leucichthys|BCF-646-2  
Stenodus leucichthys|BCF-646-1  
Stenodus leucichthys|BCF-0592-4  
Stenodus leucichthys|BCF-0592-3  
Stenodus leucichthys|BCF-0592-1  
Stenodus leucichthys|BCF-0592-2  
Thymallus arcticus|BCF-687-4  
Thymallus arcticus|BCF-687-3  
Thymallus arcticus|BCF-687-2  
Thymallus arcticus|BCF-687-1  
Acipenser oxyrinchus|BCF-0009-2  
Acipenser oxyrinchus|BCF-0009-3  
Acipenser oxyrinchus|BCF-0009-4  
Acipenser oxyrinchus|BCF-0009-1  
Acipenser oxyrinchus|BCF-0009-5  
Acipenser brevirostrum|BCF-699-8  
Acipenser brevirostrum|BCF-699-7  
Acipenser brevirostrum|BCF-699-6  
Acipenser brevirostrum|BCF-699-3  
Acipenser brevirostrum|BCF-699-2  
Acipenser brevirostrum|BCF-699-12  
Acipenser brevirostrum|BCF-699-11  
Acipenser brevirostrum|BCF-699-10  
Acipenser fulvescens|BCF-0010-2  
Acipenser fulvescens|BCF-0270-3  
Acipenser fulvescens|BCF-0270-2  
Acipenser fulvescens|BCF-0270-1  
Acipenser fulvescens|BCF-0495-2  
Acipenser fulvescens|BCF-0495-1

