

Source, means and results of introductions and invasions of the nonindigenous freshwater fishes of Russia  
(abbreviations are given in the text).

Taxon	source	means	results
<b>Petromyzontidae</b>			
<i>Caspiomyzon wagneri</i> (Kessler, 1870)	T	OW	F
* <i>Eudontomyzon mariae</i> (Berg, 1931)	?T	?D	?LEst
<b>Acipenseridae</b>			
<i>Acipenser baerii</i> Brandt, 1869	T	CC, OW	F
<i>Acipenser gueldenstaedtii</i> Brandt et Ratzeburg, 1833	T	CC, OW	F
<i>Acipenser mikadoi</i> (Hilgendorf, 1892)	T	OW	F
<i>Acipenser ruthenus</i> Linnaeus, 1758	T	CC, OW	LEst
<i>Acipenser stellatus</i> Pallas, 1771	T	CC	F
<i>Huso huso</i> (Linnaeus, 1758)	T	CC, OW	F
<b>Polyodontidae</b>			
<i>Polyodon spathula</i> (Walbaum, 1792)	For	CC, OW	F
<b>Anguillidae</b>			
<i>Anguilla anguilla</i> (Linnaeus, 1758)	T	OW, D	F
<b>Clupeidae</b>			
<i>Alosa caspia</i> (Eichwald, 1838)	T	D	LEst
<i>Alosa sapidissima</i> (Wilson, 1811)	For	OW	F
<i>Clupeonella cultriventris</i> (Nordmann, 1840)	T	RExp	WEst
<b>Cyprinidae</b>			
<i>Abbottina rivularis</i> (Basilewsky, 1855)	T	?UR	LEst
<i>Abramis brama</i> (Linnaeus, 1758)	T	OW, RExp	WEst
<i>Abramis sapa</i> (Pallas, 1814)	T	D	LEst
<i>Acanthorhodeus asmussii</i> (Dybowski, 1872)	T	?UR	LEst
<i>Acanthorhodeus chankaensis</i> (Dybowski, 1872)	T	?UR	LEst
<i>Alburnus chalcoides</i> (Guldenstadt, 1772)	T	OW, D	LEst
<i>Aristichthys nobilis</i> (Richardson, 1845)	For	CC, OW	F
<i>Aspius aspius</i> (Linnaeus, 1758)	T	D	LEst
<i>Barbus brachycephalus</i> Kessler, 1872	T	OW	F
<i>Barbus ciscaucasicus</i> Kessler, 1877	T	D	LEst
<i>Carassius auratus</i> (Linnaeus, 1758)	?For	CC, ?OW	?
<i>Carassius carassius</i> (Linnaeus, 1758)	T	OW	LEst
<i>Carassius gibelio</i> (Bloch, 1782)	T	CC, OW, RExp	WEst
<i>Ctenopharyngodon idella</i> (Valenciennes, 1844)	T	CC, OW	F
<i>Culter alburnus</i> Basilewsky, 1855	T	?OW	LEst
<i>Cyprinus carpio</i> Linnaeus, 1758	T	CC, OW, Esc	WEst
<i>Hemibarbus maculatus</i> Bleeker, 1871	T	?UR	LEst
<i>Hypophthalmichthys molitrix</i> (Valenciennes, 1844)	T	CC, OW	F
<i>Leuciscus idus</i> (Linnaeus, 1758)	T	CC, OW	TEst
<i>Leuciscus waleckii</i> (Dybowski, 1869)	T	?	LEst
<i>Mylopharyngodon piceus</i> (Richardson, 1846)	T	CC, OW	F
<i>Ochetobius elongatus</i> (Kner, 1867)	For	OW	F
<i>Opsariichthys uncirostris</i> (Temminck et Schlegel, 1846)	T	?	LEst
<i>Parabramis pekinensis</i> (Basilewsky, 1855)	T	CC	F
<i>Pelecus cultratus</i> (Linnaeus, 1758)	T	D	LEst
<i>Phoxinus phoxinus</i> (Pallas, 1814)	T	UR, D	LEst
<i>Pseudorasbora parva</i> (Temminck et Schlegel, 1846)	T	UR, RExp	WEst
<i>Rhodeus amarus</i> (Bloch, 1782)	T	RExp	WEst
<i>Romanogobio pentatrichus</i> Naseka et Bogutskaya, 1998	T	D	LEst
<i>Rutilus frisii</i> (Nordmann, 1840)	T	OW	LEst
<i>Rutilus rutilus</i> (Linnaeus, 1758)	T	OW, D	LEst
<i>Scardinius erythrophthalmus</i> (Linnaeus, 1758)	T	D	LEst
<i>Varicorhinus capoeta</i> (Guldenstadt, 1773)	For	OW	F
<i>Vimba vimba</i> (Linnaeus, 1758)	T	OW, D	LEst
<b>Catostomidae</b>			
<i>Catostomus catostomus</i> (Forster, 1773)	T	CC, Esc	F
<i>Ictiobus bubalus</i> (Rafinesque, 1818)	For	CC, OW	F
<i>Ictiobus cyprinellus</i> (Valenciennes, 1844)	For	CC, OW	F
<i>Ictiobus niger</i> (Rafinesque, 1820)	For	CC, OW	F
<b>Balitoridae</b>			
<i>Lefua costata</i> (Kessler, 1876)	T	UR	LEst
<b>Siluridae</b>			
<i>Parasilurus asotus</i> (Linnaeus, 1758)	T	OW, RExp	WEst
<i>Silurus glanis</i> Linnaeus, 1758	T	OW	LEst
<i>Silurus soldatovi</i> Nikolsky et Sojn, 1948	T	OW	LEst
<i>Pelteobagrus fulvidraco</i> (Richardson, 1846)	T	?UR	LEst
<b>Ictaluridae</b>			
<i>Ictalurus punctatus</i> (Rafinesque, 1818)	For	CC, Esc	LEst
** <i>Ameiurus nebulosus</i> (Lesueur, 1819)	For	?	?

<b>Clariidae</b>			
<i>Clarias gariiepinus</i> (Burchell, 1822)	For	CC	F
<b>Esocidae</b>			
<i>Esox lucius</i> Linnaeus, 1758	T	OW	WEst
<i>Esox reichertii</i> Dybowski, 1869	T	OW	LEst
<b>Osmeridae</b>			
<i>Osmerus eperlanus</i> (Linnaeus, 1758)	T	RExp	WEst
<b>Plecoglossidae</b>			
<i>Plecoglossus altivelis</i> Temminck et Schlegel, 1846	For	OW	F
<b>Coregonidae</b>			
<i>Coregonus albula</i> (Linnaeus, 1758)	T	OW, RExp	WEst
<i>Coregonus 'baerii'</i> Kessler, 1864	T	OW	F
<i>Coregonus 'baunti'</i> Muchomedijarov, 1948	T	OW	F
<i>Coregonus 'ludoga'</i> Berg, 1916	T	OW	TEst
<i>Coregonus 'maraenoides'</i> Berg, 1916	T	OW	WEst
<i>Coregonus pidschian</i> (Gmelin, 1789)	T	OW	F
<i>Coregonus migratorius</i> (Georgi, 1775)	T	OW	LEst
<i>Coregonus muksun</i> (Pallas, 1814)	T	CC, OW	F
<i>Coregonus nasus</i> (Pallas, 1776)	T	CC, OW	F
<i>Coregonus peled</i> (Gmelin, 1789)	T	CC, OW	LEst
<i>Coregonus sardinella</i> Valenciennes, 1848	T	OW	F
<i>Stenodus leucichthys</i> (Guldenstadt, 1772)	T	CC, OW	F
<b>Salmonidae</b>			
<i>Hucho taimen</i> (Pallas, 1773)	T	CC	F
<i>Oncorhynchus gorbuscha</i> (Walbaum, 1792)	T	OW, RExp	?WEst
<i>Oncorhynchus keta</i> (Walbaum, 1792)	T	OW	F
<i>Oncorhynchus kisutch</i> (Walbaum, 1792)	T	CC, OW	F
<i>Oncorhynchus nerka</i> (Walbaum, 1792)	T	OW	F
<i>Oncorhynchus tshawytscha</i> (Walbaum, 1792)	T	OW	F
<i>Parasalmo mykiss</i> (Walbaum, 1792)	T	CC, OW,	LEst
		Esc	
<i>Salmo salar</i> Linnaeus, 1758	T	OW	F
<i>Salmo trutta</i> Linnaeus, 1758	T	CC, OW	F
<i>Salmo ezenami</i> Berg, 1948	T	OW	LEst
<i>Salmo ischchan</i> Kessler, 1877	For	OW	F
<i>Salvelinus fontinalis</i> (Mitchill, 1814)	For	CC, Esc	LEst
<i>Salvelinus lepechini</i> (Gmelin, 1789)	T	OW	F
<b>Thymallidae</b>			
<i>Thymallus baicalensis</i> Dybowski, 1874	T	OW	?
<i>Thymallus brevipinnis</i> Svetovidov, 1931	T	OW	?
<b>Oryziidae</b>			
<i>Oryzias sinensis</i> Chen, Uwa et Chu, 1989	For	OW, RExp	WEst
<b>Poeciliidae</b>			
<i>Gambusia holbrooki</i> Girard, 1859	For	OW, RExp	WEst
<i>Poecilia reticulata</i> Peters, 1859	For	AR	LEst
<b>Gasterosteidae</b>			
<i>Pungitius platygaster</i> (Kessler, 1859)	T	RExp	WEst
<i>Pungitius pungitius</i> (Linnaeus, 1758)	T	RExp	WEst
<b>Syngnathidae</b>			
<i>Syngnathus abaster</i> Risso, 1826	T	RExp	WEst
<b>Centrarchidae</b>			
** <i>Lepomis gibbosus</i> (Linnaeus, 1758)	For	?	?
<i>Micropterus salmoides</i> (Lacepede, 1802)	For	OW	TEst
<b>Moronidae</b>			
<i>Morone saxatilis</i> (Walbaum, 1792)	For	OW	LEst
<b>Percidae</b>			
<i>Perca fluviatilis</i> Linnaeus, 1758	T	OW, RExp	WEst
<i>Sander lucioperca</i> (Linnaeus, 1758)	T	OW, RExp	WEst
<i>Sander volgensis</i> (Gmelin, 1789)	T	RExp	WEst
<b>Cichlidae</b>			
<i>Oreochromis aureus</i> (Steingachner, 1864)	For	CC, Esc	?F
<i>Oreochromis mossambicus</i> (Peters, 1852)	For	CC, Esc	?F
<i>Oreochromis niloticus</i> (Linnaeus, 1758)	For	CC, Esc	F
<i>Oreochromis urolepis</i> (Norman, 1922)	For	CC, Esc	?F
<i>Tilapia zillii</i> (Gervais, 1848)	For	CC	F
<b>Odontobutidae</b>			
<i>Perccottus glenii</i> Dybowski, 1877	T	AR, UR,	WEst
		RExp	
<b>Gobiidae</b>			
<i>Benthophilus stellatus</i> (Sauvage, 1874)	T	D	LEst
<i>Benthophilus leobergi</i> Berg, 1949	T	UR, RExp	WEst
<i>Knipowitschia caucasica</i> (Berg, 1916)	T	D	LEst
<i>Knipowitschia longicaudata</i> (Kessler, 1877)	T	D	LEst
<i>Neogobius gorlap</i> Iljin, 1949	T	D	LEst
<i>Neogobius gymnotrachelus</i> (Kessler, 1857)	T	D	LEst
<i>Neogobius melanostomus</i> (Pallas, 1814)	T	RExp	WEst
<i>Proterorhinus marmoratus</i> (Pallas, 1814)	T	RExp	WEst
<b>Osphronemidae</b>			
* <i>Macropodus chinensis</i> (Bloch, 1790)	?For	?	?

	<b>Channidae</b>			
	<i>Channa argus</i> (Cantor, 1842)	T	OW	F
	<b>Pleuronectidae</b>			
	<i>Platichthys flesus</i> (Linnaeus, 1758)	T	OW	F

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\* - native range is not known with certainty.

\*\* - occurrence of the species in Russia is probable but not reliably confirmed.

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