

Appendix 1

Species	Country Hatchery Production	Env.	Reported period (years)	Reported years	Countries ASFA	Countries other sources
<i>Acanthopagrus latus</i>	United Arab Emirates	m	1	1997		
<i>Acanthopagrus schlegeli</i>	Republic of Korea	m	9	1986–1995	Japan	
<i>Acipenser brevirostrum</i>	USA	mbf	9	1989–1997		
<i>Acipenser fulvescens</i>	USA	mbf	3			
<i>Acipenser guldenstadti</i>	Ukraine	mbf	7	1984–1988, 1992, 1993		
<i>Acipenser oxyrhynchus</i>	USA	mbf	5	1994–1997		
<i>Acipenser</i> spp.	Iran	mbf	2	<1990		
<i>Acipenser</i> spp.	USA	mbf	4	1987, 1988, 1995, 1997		
<i>Acipenser sturio</i>	France	mbf	1	1992		
<i>Acipenseridae</i>	Azerbaijan	mbf	3	1989–1991		
<i>Acipenseridae</i>	Georgia	mbf	2	<1990		
<i>Acipenseridae</i>	Russian Federation	mbf	6	1992–1997		
<i>Acipenseridae</i>	Ukraine	mbf	4	<1991		
<i>Acipenseridae</i>	USSR	mbf	6	1986–1991		
<i>Alosa sapidissima</i>	No data	mbf			USA (Pennsylvania)	
<i>Anadara broughtonii</i>	No data	mbf				Japan
<i>Anguilla anguilla</i>	Denmark	mbf	1		Denmark	
<i>Anguilla anguilla</i>	France	mbf	1			
<i>Anguilla anguilla</i>	Germany	mbf	4			
<i>Anguilla anguilla</i>	Italy	mbf	5			
<i>Anguilla anguilla</i>	Lithuania	mbf	1			
<i>Anguilla japonica</i>	Japan	mbf	3			
<i>Atractoscion nobilis</i>	No data	m			USA (California)	
<i>Centropomus undecimalis</i>	No data	mbf			USA (Florida)	
<i>Chelonia mydas</i>	No data	mbf				Philippines
<i>Chrysophrys major</i>	Republic of Korea	m	2	1986,1987		
<i>Coregonus lavaretus</i>	Estonia	mbf	6	1992–1997		
<i>Coregonus lavaretus</i>	Finland	mbf	2	<1987		
<i>Coregonus lavaretus</i>	Kyrgyzstan	mbf	1	1995		
<i>Coregonus lavaretus</i>	Lithuania	mbf	3	1992, 1996, 1997		
<i>Coregonus lavaretus</i> (autumn fry)	Poland	mbf	1	1993, 1996, 1997		
<i>Coregonus lavaretus</i> (larvae)	Poland	mbf	3	1992		
<i>Coregonus lavaretus</i> (summer fry)	Poland	mbf	1	1992		
<i>Coregonus</i> spp.	Finland	mbf	10	1984–1987		
<i>Coregonus</i> spp.	France	mbf	3	<1987		
<i>Coregonus</i> spp.	Russian Federation	mbf	6	1992–1997		
<i>Coryphaena hippurus</i>	No data	mb			Hawaii	
<i>Crassostrea gigas</i>	Japan	mb	3	1994, 1996		
<i>Crassostrea rhizophorae</i>	Grenada	mb	1	1984		
<i>Crassostrea</i> spp.	Mexico	m	1	1985		
<i>Crassostrea virginica</i>	Grenada	mb	1	1984	USA	
<i>Dicentrarchus labrax</i>	Germany	mb	1	1997		

m, b and f refer to marine, brackish and freshwater environments respectively.

Species	Country Hatchery Production	Env.	Reported period (years)	Reported years	Countries ASFA	Countries other sources
<i>Dicentrarchus labrax</i>	Cyprus	mbf	1	1991		
<i>Dicentrarchus labrax</i>	Egypt	mbf	3	1995–1997		
<i>Dicentrarchus labrax</i>	Tunisia	mbf	1	1990		
<i>Epinephelus fuscoguttatus</i>	Singapore	m	1	1991		
<i>Fugu rubripes</i>	Republic of Korea	mb	1	1986		
<i>Gadus macrocephalus</i>	No data	m			USA (Puget Sound)	
<i>Gadus morhua</i>	Norway	m	2	1986, 1987	Norway, Denmark, Canada	
<i>Gambusia gaigei</i>	USA	mb	3	1989, 1992, 1993		
<i>Haliotis discus hannai</i>	No data	mbf				Japan
<i>Haliotis diversicolor aguatilis</i>	Taiwan Province of China	m	2	1996, 1997		
<i>Haliotis fulgens</i>	Mexico	m	1	1985		
<i>Haliotis notohaliotis discus</i>	Republic of Korea	m	3	1987, 1991, 1992		
<i>Hemicentrotus pulcherrimus</i>	Republic of Korea	m	1	1992		
<i>Homarus americanus</i>	No data	mbf				USA
<i>Homarus gammarus</i>	UK (Scotland)	m	1	1997		
<i>Homarus gammarus</i>	No data	m			Norway, UK, USA (Maine)	
<i>Huso huso</i>	Ukraine	mbf	2	<1987		
<i>Hybrid Morone chrysops,</i>	USA	mbf	8	1985, 1989–1994, 1996		
<i>Morone saxatilis</i>						
<i>Lampetra fluviatilis</i>	Estonia	mbf	1	1992		
<i>Lampetra fluviatilis</i>	Latvia	mbf	6	1991, 1993–1997		
<i>Lateolabrax japonicus, Lates calcarifer</i>	Taiwan Province of China	mbf	1	1997		
<i>Lates calcarifer</i>	Australia	mbf	6	1985, 1987–1991		
<i>Lates calcarifer</i>	Brunei	mbf	1	1993		
<i>Lates calcarifer</i>	French Polynesia	mbf	1	1991		
<i>Lates calcarifer</i>	Malaysia	mbf	1	1995		
<i>Lates calcarifer</i>	Singapore	mbf	6	1986–1991		
<i>Lepidochelys kempi</i>	No data	mbf				USA
<i>Mercenaria mercenaria</i>	No data	mb			USA (North Carolina, New York)	
<i>Mithrax spinosissimus</i>	Dominican Republic	m	1	1984		
<i>Mithrax spinosissimus</i>	Turks & Caicos Islands	m	1	1992		
<i>Morone saxatilis</i>	USA	mbf	14	1984–1997	USA	
<i>Morone spp.</i>	Egypt	mbf	1	1996		
<i>Mugil auratus</i>	Ukraine	mbf	4	<1987		
<i>Mugil capito</i>	Israel	mbf	1	1994		
<i>Mugil cephalus</i>	Israel	mbf	2	1985, 1996	Hawaii	
<i>Mugil cephalus</i>	Republic of Korea	mbf	1	1993		
<i>Mugil cephalus, Liza ramada</i>	Egypt	mbf	6	1991–1997		
<i>Mugil incilllis</i>	Colombia	mb	3	1985–1987		
<i>Mugil spp.</i>	Colombia	mbf	2	<1989		

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<i>Mugil</i> spp.	Ukraine	mbf	6	1988–1993		
<i>Oncorhynchus clarki</i>	USA	mbf	12	1984, 1986	USA (California)	
<i>Oncorhynchus gorbusha</i>	Chile	mbf	2	<1986	Russian Federation, USA (Alaska)	
<i>Oncorhynchus gorbusha</i>	USA	mbf	12	1992, 1993		
<i>Oncorhynchus keta</i>	Chile	mbf	2	<1987	USA (Oregon), Japan	
<i>Oncorhynchus keta</i>	Republic of Korea	mbf	12	1996, 1997		
<i>Oncorhynchus keta</i>	USA	mbf	14	1984–1997		
<i>Oncorhynchus kisutch</i>	Chile	mbf	2	<1988	USA, Canada	
<i>Oncorhynchus kisutch</i>	Cyprus	mbf	1	1989		
<i>Oncorhynchus kisutch</i>	France	mbf	1	1987		
<i>Oncorhynchus kisutch</i>	USA	mbf	14	1984–1997		
<i>Oncorhynchus masou</i>	Chile	mbf	3	<1987		
<i>Oncorhynchus masou</i>	Republic of Korea	mbf	4	<1990		
<i>Oncorhynchus mykiss</i>	Argentina	mbf	7	1984, 1986, 1987, 1989, 1990, 1993, 1996		
<i>Oncorhynchus mykiss</i>	Australia	mbf	7	<1987		
<i>Oncorhynchus mykiss</i>	Belgium	mbf	11	1984, 1985, 1990		
<i>Oncorhynchus mykiss</i>	Brazil	mbf	2	<1987		
<i>Oncorhynchus mykiss</i>	Chile	mbf	4	<1988		
<i>Oncorhynchus mykiss</i>	Colombia	mbf	8	1984–1991		
<i>Oncorhynchus mykiss</i>	Cyprus	mbf	13	1996		
<i>Oncorhynchus mykiss</i>	Denmark	mbf	1	1986		
<i>Oncorhynchus mykiss</i>	Estonia	mbf	2	1992, 1996		
<i>Oncorhynchus mykiss</i>	Finland	mbf	12	1984, 1985		
<i>Oncorhynchus mykiss</i>	France	mbf	6	1992–1997		
<i>Oncorhynchus mykiss</i>	Iran	mbf	6	1989–1993, 1995		
<i>Oncorhynchus mykiss</i>	Republic of Korea	mbf	3	<1986		
<i>Oncorhynchus mykiss</i>	Latvia	mbf	9	1984–1992		
<i>Oncorhynchus mykiss</i>	Madagascar	mbf	1	1986		
<i>Oncorhynchus mykiss</i>	Mexico	mbf	3	1985, 1996, 1997		
<i>Oncorhynchus mykiss</i>	Morocco	mbf	12	1986, 1987		
<i>Oncorhynchus mykiss</i>	Norway	mbf	2	<1987		
<i>Oncorhynchus mykiss</i>	Norway	mbf	3	1988–1990		
<i>Oncorhynchus mykiss</i>	Peru	mbf	5	1986, 1994–1997		
<i>Oncorhynchus mykiss</i>	Romania	mbf	1	1997		
<i>Oncorhynchus mykiss</i>	UK (Northern Ireland)	mbf	7	1990–1992, 1994–1997		
<i>Oncorhynchus mykiss</i>	USA	mbf	14	1984–1997		
<i>Oncorhynchus mykiss</i>	Uzbekistan	mbf	2	1993, 1994		
<i>Oncorhynchus mykiss</i>	Venezuela	mbf	1	1993		
<i>Oncorhynchus mykiss</i> (fry 1+)	Poland	mbf	1	1992		
<i>Oncorhynchus mykiss</i> , <i>Oncorhynchus masou</i> , <i>Oncorhynchus rhodorus</i> , <i>Oncorhynchus kisutch</i> , <i>Salvelinus pluvius</i>	Japan	mbf	3	1994–1996		

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<i>Oncorhynchus nerka</i>	USA	mbf	14	1984–1997	USA (Alaska)	
<i>Oncorhynchus</i> spp.	USA	mbf	2	<1986		
<i>Oncorhynchus tshawytscha</i>	Australia	mbf	5	1986, 1988–1991	USA, Canada	
<i>Oncorhynchus tshawytscha</i>	Chile	mbf	2	<1988		
<i>Oncorhynchus tshawytscha</i>	New Zealand	mbf	2	<1988		
<i>Oncorhynchus tshawytscha</i>	USA	mbf	14	1984–1997		
<i>Ophiodon elongatus</i>	No data	m			USA	USA
<i>Oplegnathus fasciatus</i>	Republic of Korea	m	6	1987, 1991–1995		
<i>Ostrea edulis</i>	UK (Scotland)	m	1	1997		
<i>Pagrus major</i>	Japan	m	1		Japan	
<i>Pagrus major</i>	Republic of Korea	m	9	1986, 1988–1995		
<i>Pagrus major</i>	China (Taiwan)	m	1	1997		
<i>Pagrus major</i> , <i>Acanthopgrus schlegeli</i> , <i>Ebynniss japonica</i>	Japan	m	2	1994–1996		
<i>Panope abrupta</i>	No data	mbf				USA
<i>Paralichthys californicus</i>	No data	mb			USA (California)	
<i>Paralichthys olivaceus</i>	Japan	m	2	1995, 1996	Japan, China (1987)	
<i>Paralichthys olivaceus</i>	Republic of Korea	m	9	1987–1995		
<i>Patinopecten yessoensis</i>	Japan	m	3	1994–1996	Japan, France	
<i>Pecten maximus</i>	UK (Scotland)	m	1	1997		
<i>Pecten novaezelandiae</i>	No data	mbf				New Zealand
<i>Penaeus (orientalis) chinensis</i>	China	mb	1	1985		
<i>Penaeus japonicus</i>	Japan	mb	3	1994–1996	Japan	
<i>Penaeus japonicus</i>	Republic of Korea	mb	7	1986–1992		
<i>Penaeus japonicus</i>	Taiwan Province of China	mb	2	1994, 1997		
<i>Penaeus merguensis</i>	Malaysia	mb	1			
<i>Penaeus merguensis</i>	Singapore	mb	4	1986–1989	Singapore	
<i>Penaeus monodon</i>	Brunei	mb	2	1994, 1995		
<i>Penaeus monodon</i>	Republic of Korea	mb	2	1994, 1995		
<i>Penaeus monodon</i>	Mauritius	mb	1	1997		
<i>Penaeus monodon</i>	Seychelles	mb	1	1989		
<i>Penaeus orientalis kishimouye</i>	Republic of Korea	mb	8	1987–1992, 1994, 1995		
<i>Penaeus</i> spp.	Egypt	mb	1	1995		
<i>Penaeus stylirostris</i>	Panama	mb	1	1992		
<i>Penaeus vannamei</i> , <i>Penaeus stylirostris</i>	Panama	m	1	1991		
<i>Peneaus monodon</i>	Australia	mb	1	1990		
<i>Perna perna</i>	Mozambique	mb	1	1986		
<i>Pincta fucata martensii</i>	Republic of Korea	m	1	1992		
<i>Pinctada fucata</i>	Japan	mb	3	1994–1996	India	
<i>Platichthys flesus luscus</i>	Ukraine	mbf	3	1991–1993		
<i>Platichthys flesus</i>	No data	mbf			Denmark, Netherlands (1977)	
<i>Plecoglossus</i>	Republic of Korea	mbf	1	1993		
<i>Plectroplites ambiguus</i>	Australia	mbf	1	1985		

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<i>Pleuronectes platessa</i>	No data	mb			Denmark, Netherlands (1977)	
<i>Polydactylus sexfilis</i>	No data	mbf				Hawaii
<i>Porphyra</i> spp.	Japan	mb	2	1994, 1998		
<i>Portunus trituberculatus</i>	Republic of Korea	m	7	1988–1992, 1994, 1995		
<i>Portunus trituberculatus</i>	No data	mbf				Japan
<i>Pseudocaranx dentex</i>	No data	mb			Japan	
<i>Pseudocaranx dentex</i>	No data	mbf				Japan
<i>Puntazo puntazo</i>	Cyprus	m	1	1991		
<i>Salmo salar</i>	Argentina	mbf	5	1984, 1986, 1987, 1989, 1990		
<i>Salmo salar</i>	Australia	mbf	2	<1987		
<i>Salmo salar</i>	Denmark	mbf	1	1986		
<i>Salmo salar</i>	Estonia	mbf	4	1992, 1994, 1996, 1997		
<i>Salmo salar</i>	Faeroe Islands	mbf	2	<1989		
<i>Salmo salar</i>	Finland	mbf	12	1984, 1985		
<i>Salmo salar</i>	France	mbf	8	1985, 1986, 1992–1997		
<i>Salmo salar</i>	Iceland	mbf	8	1989, 1991–1997		
<i>Salmo salar</i>	Latvia	mbf	14	1984–1997		
<i>Salmo salar</i>	Lithuania	mbf	1	1993		
<i>Salmo salar</i>	Norway	mbf	5	1986–1990		
<i>Salmo salar</i>	Poland	mbf	2	1995, 1996		
<i>Salmo salar</i>	Sweden	mbf	12	1984, 1985		
<i>Salmo salar</i>	UK (England/Wales)	mbf	4	1992–1995		
<i>Salmo salar</i>	UK (Northern Ireland)	mbf	8	1989–1992, 1994–1997		
<i>Salmo salar</i>	UK (Scotland)	mbf	1	1986		
<i>Salmo salar</i>	USA	mbf	14	1984–1997		
<i>Salmo trutta</i>	Australia	mbf	1	1997	Norway, Finland, Canada	
<i>Salmo trutta</i>	Denmark	mbf	1	1986		
<i>Salmo trutta</i>	Faeroe Islands	mbf	2	<1987		
<i>Salmo trutta</i>	Finland	mbf	12	1984, 1985		
<i>Salmo trutta</i>	France	mbf	9	1985–1987, 1992–1997		
<i>Salmo trutta</i>	Iceland	mbf	2	1988, 1989		
<i>Salmo trutta</i>	Latvia	mbf	6	1991, 1993–1997		
<i>Salmo trutta</i>	Lithuania	mbf	3	1992–1994		
<i>Salmo trutta</i>	Morocco	mbf	13	1986		
<i>Salmo trutta</i>	Norway	mbf	4	<1990		
<i>Salmo trutta</i>	South Africa	mbf	3	1993–1995		
<i>Salmo trutta</i>	Sweden	mbf	12	1984, 1985		
<i>Salmo trutta</i>	UK (England/Wales)	mbf	4	1992–1995		
<i>Salmo trutta</i>	UK (Northern Ireland)	mbf	5	1992, 1994–1997		
<i>Salmo trutta</i>	USA	mbf	12	1984, 1986		
<i>Salmo trutta labrax</i>	Georgia	mbf	8	1984–1991		
<i>Salmo trutta trutta</i>	Estonia	mbf	6	1992–1997		

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<i>Salmo trutta trutta</i>	Poland	mbf	3	1992, 1995, 1996		
<i>Salvelinus alpinus</i>	Finland	mbf	2	<1987		
<i>Salvelinus alpinus</i>	France	mbf	8	1985, 1986, 1992–1997		
<i>Salvelinus alpinus</i>	Iceland	mbf	2	1988, 1989		
<i>Salvelinus alpinus</i>	Switzerland	mbf	2	1996, 1997		
<i>Salvelinus alpinus</i>	USA	mbf	5	1986–1990, 1991		
<i>Salvelinus confluentus</i>	USA	mbf	1	1996		
<i>Salvelinus fontinalis</i> ,	Norway	mbf	2	<1987		
<i>Salvelinus alpinus</i> ,						
<i>Thymallus thymallus</i>						
<i>Salvelinus malma</i>	USA	mbf	1	1984		
<i>Salvelinus</i> spp.	Finland	mbf	10	1984–1987		
<i>Salvelinus</i> spp.	Norway	mbf	3	1988–1990		
Scallop	Russian Federation	mb	3	1986–1988		
<i>Sciaenops ocellatus</i>	USA	mb	3	1984, 1988	USA (Texas)	
<i>Scophthalmus maximus</i>	No data	mbf				Denmark
<i>Scylla serrata</i>	Australia	mb	4	1986–1989		
<i>Sebastes schlegeli</i>	Republic of Korea	m	7	1988–1992, 1994, 1995	Japan	
<i>Seriola quinqueradiata</i> ,	Japan	m	3	1994–1996		
<i>S. aureovittata</i> , <i>S. dumerili</i>						
<i>Siganus canaliculatus</i>	United Arab Emirates	mb	2	1989, 1991		
<i>Sparus aurata</i>	No data	mb			Tunisia (lagoons)	
<i>Sparus auratus</i>	Cyprus	mb	1	1991		
<i>Sparus auratus</i>	Egypt	mb	3	1995–1997		
<i>Sparus auratus</i> ,	Cyprus	mb	1	1992		
<i>Dicentrarchus labrax</i>						
<i>Strombus gigas</i>	Belize	m	1	1986		
<i>Strombus gigas</i>	Sao Tome	m	1	1984		
<i>Strombus gigas</i>	Turks & Caicos Islands	m	2	1992, 1993		
<i>Strongylocentrotus lividus</i>	Republic of Korea	m	1	1992		
<i>Sulculus diversicolor aquatilis</i>	Republic of Korea	m	2	1991, 1992		
<i>Takifugu rubripes</i>	No data	mbf				Japan
<i>Tridacna derasa</i>	Micronesia	m	1	1986	Solomon Islands, Philippines	
<i>Tridacna derasa</i>	Tonga	m	1	1997		
<i>Tridacna maxima</i>	Tonga	m	2	1996, 1997		
<i>Tridacna</i> spp.	Fiji	m	1	1992		Solomon Islands, Indo-Pacific, Philippines
<i>Trochus niloticus</i>	New Caledonia	m	1	1989		Australia, Indonesia, Vanuatu
<i>Trochus niloticus</i>	Tonga	m	2	1996, 1997		
<i>Turbo marmoratus</i>	Tonga	m	1	1997		
<i>Undaria</i>	Japan	m	3	1994, 1995		