



## RAINBOW TROUT (*ONCORHYNCHUS MYKISS*)



Source : [Information system on commercial designations](#)

### BIOLOGY AND HABITAT

- Species description ([Read more](#))

The rainbow trout, also known as steelhead trout, belongs to the family of Salmonidae, in the genus *Oncorhynchus*.

- Geographical distribution and habitat ([Read more](#))

The rainbow trout is native from the Northern American continent, but has been introduced in all the continents but Antarctica, and can be found in most oceans and sea.

### RESOURCE, EXPLOITATION AND MANAGEMENT

- Stocks and resource status/conservation measures

There are no specific conservation measures implemented on the rainbow trout.

- Production methods and fishing gears ([Read more](#))

The main fishing gears used are drifnets, gillnets and similar nets, hooks and lines, and pots and traps. The aquaculture production is much more important than wild catches.

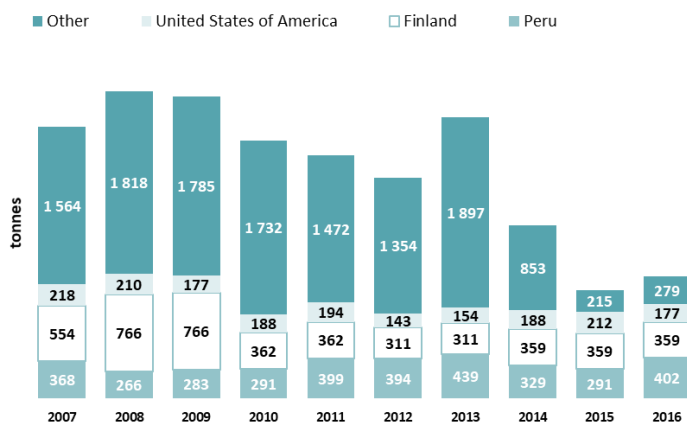
# Rainbow trout



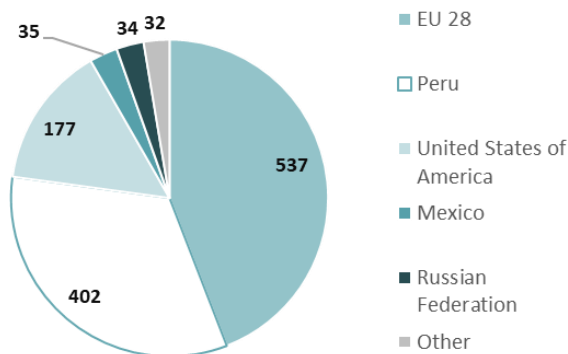
## CATCHES

- Wild catches of rainbow trout represent **0,1%** of the global rainbow trout production worldwide.
- Catches have decreased over the last decade at both global level (-55%) and EU level (-74%), after UK catches stopped in 2014.
- The top three producers (Peru, Finland and USA) account for **77%** of world catches.

### Evolution of world catches



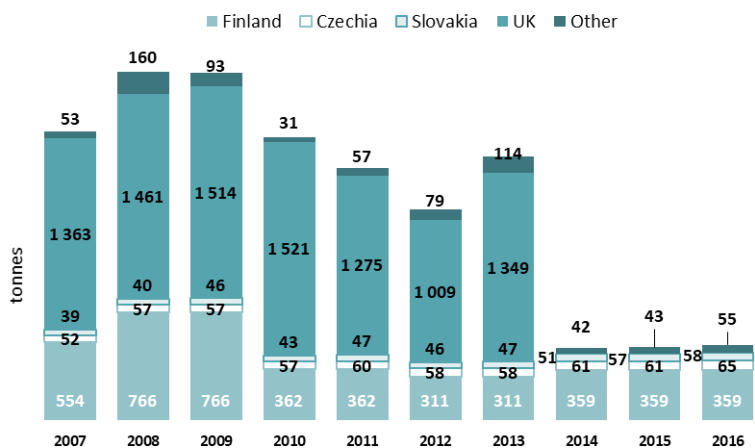
Catches (2016, tonnes)



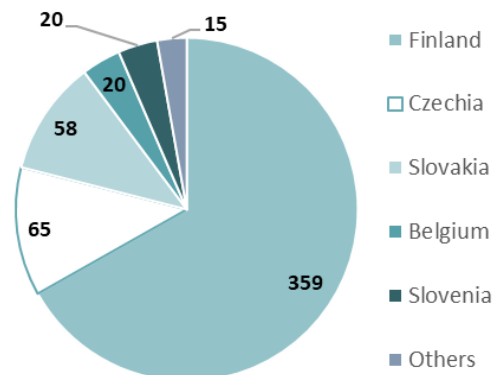
Source: FAO

### Evolution of EU catches

- The EU provides **44%** of the global rainbow trout catches in 2016 (vs. 76% in 2007).



Catches (2016, tonnes)



Source: FAO

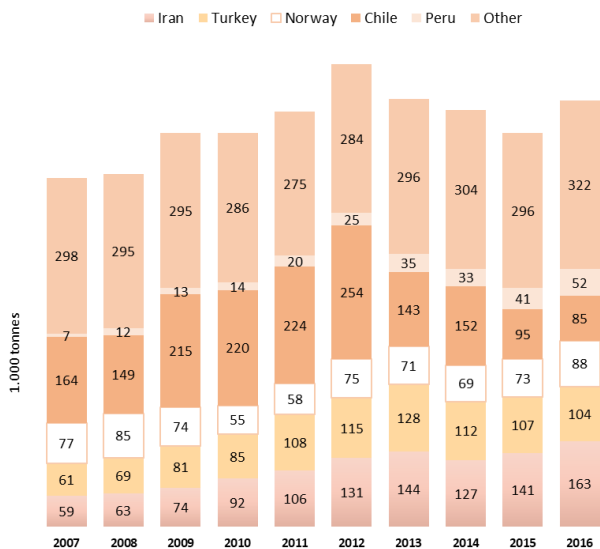
# Rainbow trout



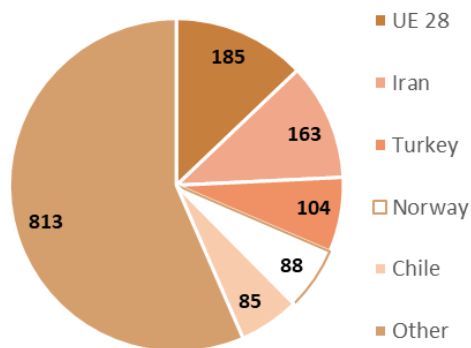
## AQUACULTURE PRODUCTION

### Evolution of world production

The world production of farmed rainbow trout has increased by 22% from 2007 to 2016, mainly driven by the growth in Iran (+178%) Turkey (+71%) and Norway (+14%).



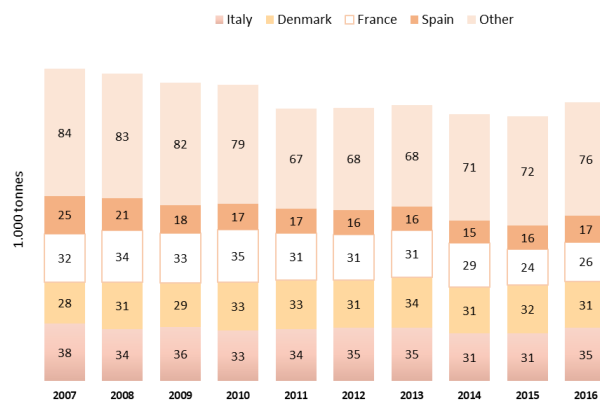
Production (2016, .1000 tonnes)



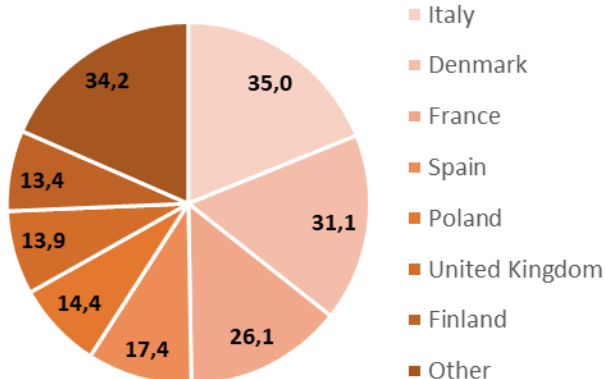
Source : FAO

### Evolution of EU production

- EU provided **23%** of the world production of farmed rainbow trout in 2016 (vs. 31% in 2007)
- The EU production decreased by **11%** over the last decade, as a consequence of the drop in the main producing countries : Italy (-7%), France (-19%) and Spain (-31%).



Production (2016, .1000 tonnes)



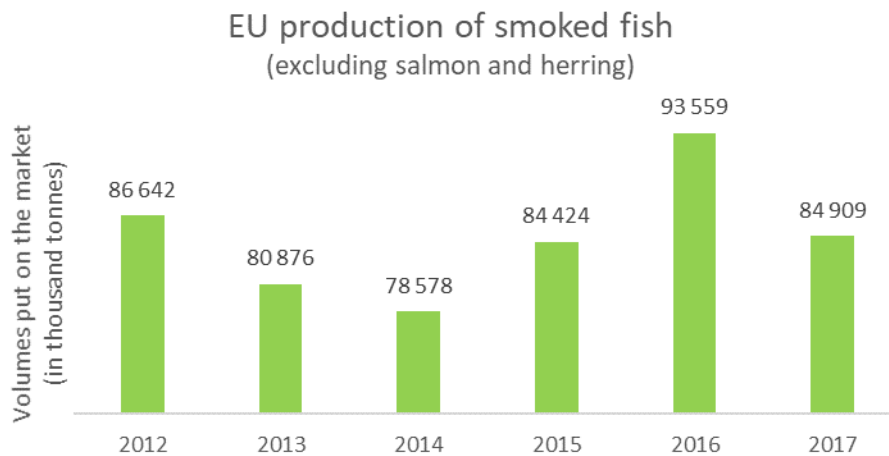
Source : FAO

## Rainbow trout



## PROCESSING (source EUROSTAT/PRODCOM)

- A significant smoking activity exists for rainbow trout in the EU.
- 1 [PRODCOM](#) code partly refers to smoked rainbow trout, but includes other types of fish :
  - 10202485 : Smoked fish (excluding herrings, Pacific, Atlantic and Danube salmon), including fillets, excluding head, tails and maws.



- The production of smoked fish, including smoked rainbow trout, remains relatively steady between 2012 and 2017, with a decrease in 2014 and a peak of production in 2016.
- Poland, the United Kingdom, Germany and France are the main producers, with **71%** of total EU production.

## Rainbow trout



## TRADE (source COMEXT)

- Combined nomenclature ([Read more](#))

### EU trade of rainbow trout products (2017, tonnes)

Source: COMEXT

CN code	Product	EU imports		EU exports	
		Intra-EU	Extra-EU	Intra-EU	Extra-EU
03019190	Live trout ( <i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , <i>Oncorhynchus clarki</i> , <i>Oncorhynchus aguabonita</i> , <i>Oncorhynchus gilae</i> )	14.643	-	19.118	481
03021120	Fresh or chilled trout of the species <i>Oncorhynchus mykiss</i> , with heads and gills on, gutted, weighing > 1,2 kg each, or with heads off, gilled and gutted, weighing > 1 kg each	20.434	8.138	20.016	1.552
03031420	Frozen trout of the species <i>Oncorhynchus mykiss</i> , with heads and gills on, gutted, weighing > 1,2 kg each, or with heads off, gilled and gutted, weighing > 1 kg each	2.746	727	3.993	3.261
03044210	Fresh or chilled fillets of the species <i>Oncorhynchus mykiss</i> , weighing > 400 g each	1.892	480	910	661
03048210	Frozen fillets of the species <i>Oncorhynchus mykiss</i> , weighing > 400 g each	648	289	339	124
03054300	Smoked trout ( <i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , <i>Oncorhynchus clarki</i> , <i>Oncorhynchus aguabonita</i> , <i>Oncorhynchus gilae</i> , <i>Oncorhynchus apache</i> and <i>Oncorhynchus chrysogaster</i> ), including fillets	15.589	3.501	11.339	1.505
16041910	Prepared or preserved salmonidae, whole or in pieces (excl. salmon and minced)	330	270	772	408
16042030	Prepared or preserved salmonidae (excl. salmon and whole or in pieces)	373	20	872	15

# Rainbow trout



## TRADE (source COMEXT)

- Combined nomenclature [\(Read more\)](#)

### EU trade of rainbow trout proucts (tonnes)

- **Main extra-EU destinations are:**

- For gutted frozen rainbow trout (NC 03031420) : China (1.556 tonnes in 2017) and Vietnam (974 tonnes), accounting together for 78% of extra-EU exports ;
- For smoked trout (NC 03054300) : Switzerland (827 tonnes), Canada (247 tonnes) and Australia (236 tonnes) ;
- For fresh or chilled rainbow trout (NC 03021120) : Belarus (1.373 tonnes).

- **Main extra-EU suppliers are:**

- For fresh or chilled rainbow trout (NC 03021120) : Norway (7.464 tonnes in 2017), which contributes to 92% of extra-EU imports ;
- For smoked trout (NC 03054300) : Turkey (3.477 tonnes), which provides 99,3% of extra-EU imports for this product.

## Rainbow trout



## PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

## First-sale (fresh, whole/gutted)

First-sale prices are presented for Italy, Denmark and France which are the main EU producers.

	2010	2011	2012	2013	2014	2015	2016	2017	Source
Italy	nd	nd	7.17	8.00	9.91	8.17	6.89	9.56	EUMOFA
Denmark	3.84	3.99	3.95	3.99	4.25	4.49	4.65	5.24	EUMOFA
France	11.59	11.93	15.02	13.68	15.40	14.04	14.90	14.12	EUMOFA

## Wholesale (fresh)

Wholesale prices correspond to prices in France.

Unweighted average price	2010	2011	2012	2013	2014	2015	2016	2017	Source
France	4.26	4.84	4.55	4.66	4.80	4.85	5.15	5.20	MIN Rungis

## Retail/consumption (fresh)

Retail prices refer to the UK, the Netherlands, France and Germany, which are along the major consumer countries in the EU.

	2010	2011	2012	2013	2014	2015	2016	2017	Source
UK	9.01	9.78	11.21	10.29	11.87	14.43	13.36	13.11	EUMOFA
Germany	Nd	Nd	10.54	10.93	10.94	11.60	11.50	11.27	EUMOFA
France	9.70	10.98	10.68	11.42	11.91	12.81	12.77	13.96	EUMOFA
Netherlands	nd	nd	14.46	14.43	14.72	15.15	15.69	16.83	EUMOFA

## Import

Import prices are presented for Poland, France and Germany, major importers of fresh/smoked rainbow trout in EU).

	2010	2011	2012	2013	2014	2015	2016	2017	Source
Poland, fresh	3.48	3.94	3.24	3.99	4.19	3.81	4.44	5.56	EUMOFA
France, fresh	3.56	4.11	3.67	3.72	4.33	4.19	4.18	4.56	EUMOFA
Germany, smoked	8.64	8.74	9.04	9.13	9.67	9.42	10.23	11.25	EUMOFA

## Export

Export prices refer to Sweden, Denmark, Spain and Poland, major EU exporters.

	2010	2011	2012	2013	2014	2015	2016	2017	Source
Sweden, fresh	3.35	3.56	3.32	3.92	4.38	3.96	5.17	6.17	EUMOFA
Denmark, fresh	3.82	3.79	3.58	3.89	3.87	4.00	4.55	4.79	EUMOFA
Spain, fresh	3.77	4.31	2.85	3.12	2.70	3.50	3.48	3.52	EUMOFA
Poland, smoked	9.13	10.39	10.73	10.84	11.99	12.20	12.69	14.02	EUMOFA

# Rainbow trout



## MARKETING ASPECTS

- Commercial designations in all EU official languages ([Read more](#))

## CONSUMPTION

- In 2016, trout ranked 14<sup>th</sup> among most consumed species in the EU.
- Apparent consumption per capita in 2016: **0,42 kg** live weight equivalent (source: [The EU Fish Market – 2018 edition](#), EUMOFA)
- Nutritional value (Rainbow trout France, fresh fillet and smoked fillet, values per 100 g – source : NUTRAQUA/AQUIMER)

Nutritional value	Rainbow trout - fresh fillet	Rainbow trout - smoked fillet
kilo calories (kcal)	136	156
Kilojoule (kJ)	569	657
Water (g)	72,3	65,4
Ashes (g)	1,3	4,2
Proteins (g)	19,1	23,1
Carbohydrates (g)	1,4	0,2
Lipids (g)	6	7
Cholesterol (mv)	52,6	47,1
Omega 6 (mg)	1026	846
Omega 3 (mg)	1718	1997
EPA (mg)	369	502
DHA (mg)	776	831