

A diver in a purple wetsuit and black fins is riding a large shark underwater. The shark is swimming towards the right, and the diver is leaning forward, resting her hands on the shark's back. The water is clear blue, and there are some small fish visible in the background.

Aquaculture

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Slovakia



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Outline

1) Introduction

2) Economy

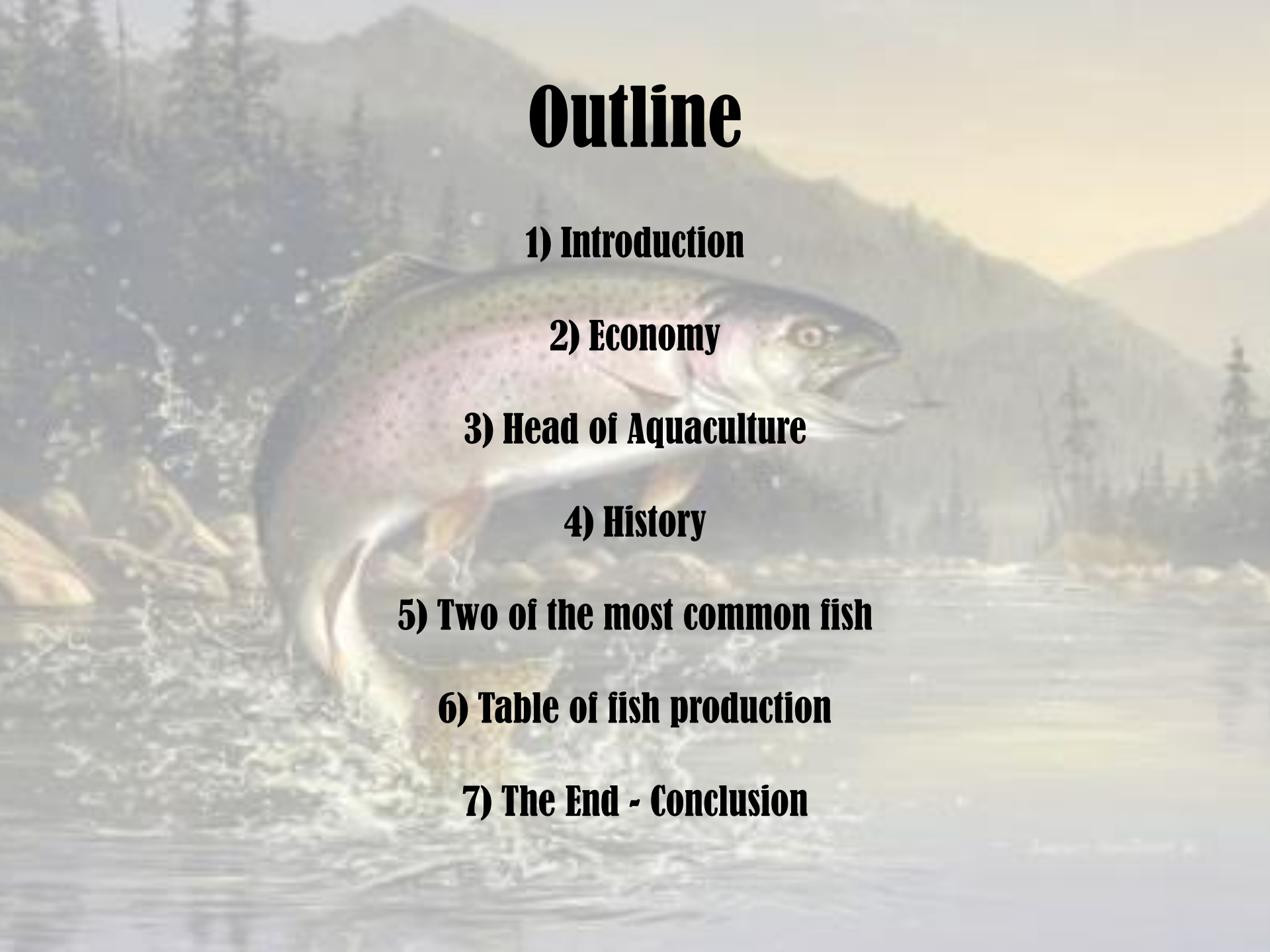
3) Head of Aquaculture

4) History

5) Two of the most common fish

6) Table of fish production

7) The End - Conclusion



1) Introduction

- **Slovakia is an inland and mostly mountainous country, situated at the watershed of two seas: Baltic Sea (to this sea flow rivers Dunajec, Poprad) and the Black Sea (Morava, Dunaj, Tisa).**
- **Composition of aquatic communities - result from claims of fauna on the properties of water.**

- Slovakia has a **widespread fish farming in ponds for farming purposes.** (Trnava ponds or ponds east of Senné ponds).



2) Economy



James Hewitt ©

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- A large rainbow trout is captured mid-jump, leaping out of a river. The fish is the central focus, with its body arched and scales shimmering. The background shows a misty, mountainous landscape with evergreen trees and a soft, hazy light, suggesting a natural, outdoor setting.
- **The economic role of fisheries and aquaculture in the Slovak national economy is marginal.**
 - **In addition to the social role, aquaculture also contributes to the development of recreation, rural tourism and water management.**
 - **All marine fish, as well as seafood (crustaceans and molluscs), are imported. Slovakia is only self-sufficient in its domestic production of rainbow trout (*Oncorhynchus mykiss*). **The production of common carp (*Cyprinus carpio*) cannot fully satisfy national market requirements.****

That's interesting!

- In the aquaculture sector are 85 percent of the workers are men and only 15 percent are women.



3) Head of Aquaculture:

- **Aquaculture and inland fisheries in relation to the EU is administered by the Ministry of Agriculture of the Slovak Republic in Bratislava.**
- **The State Veterinary and Food Administration of Slovak Republic is responsible for health and hygiene.**
- **The Ministry of Environment of the Slovak Republic in Bratislava administers recreational fishing as well as water resource management.**
- **Slovak Fish Farmers Association**

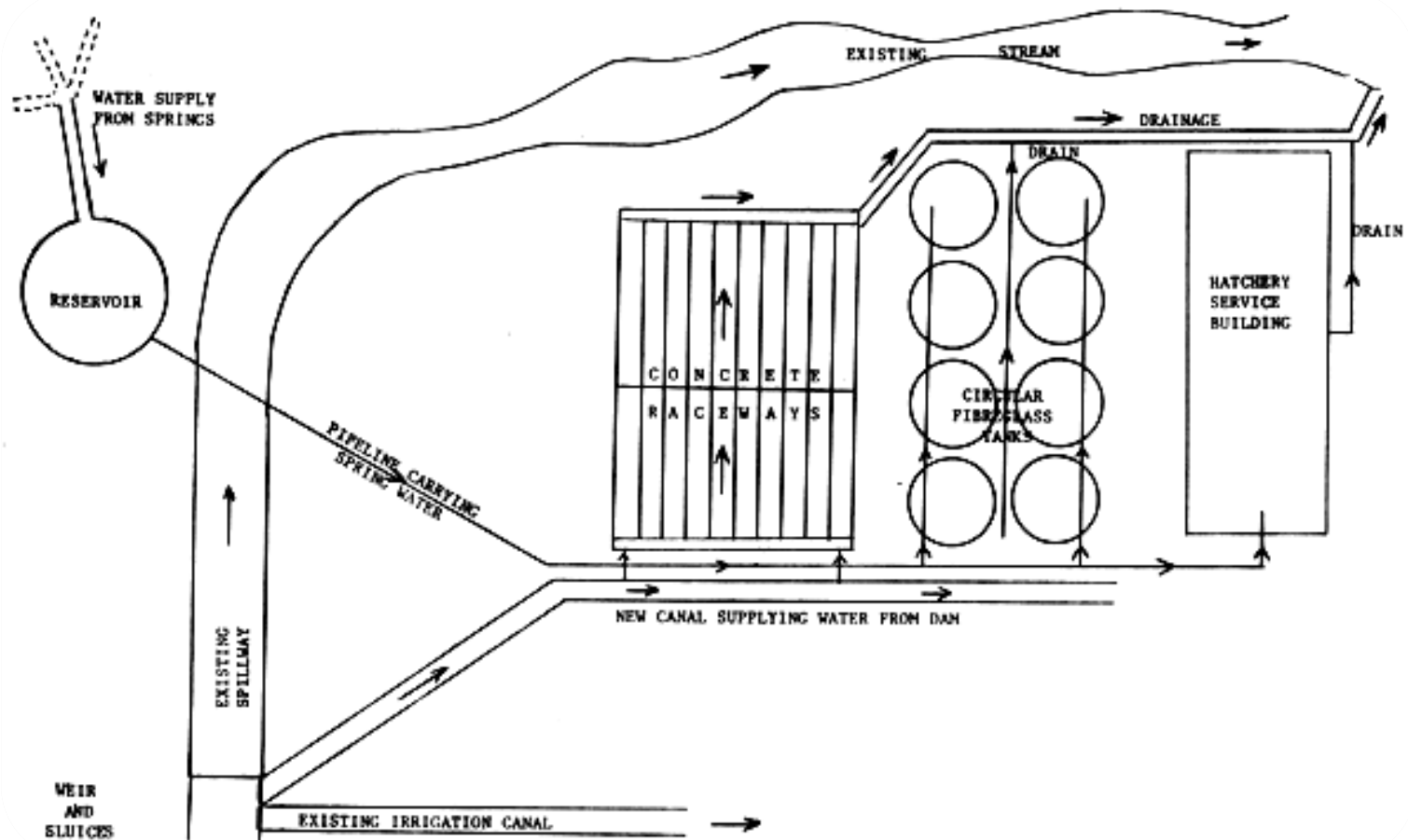
4) History

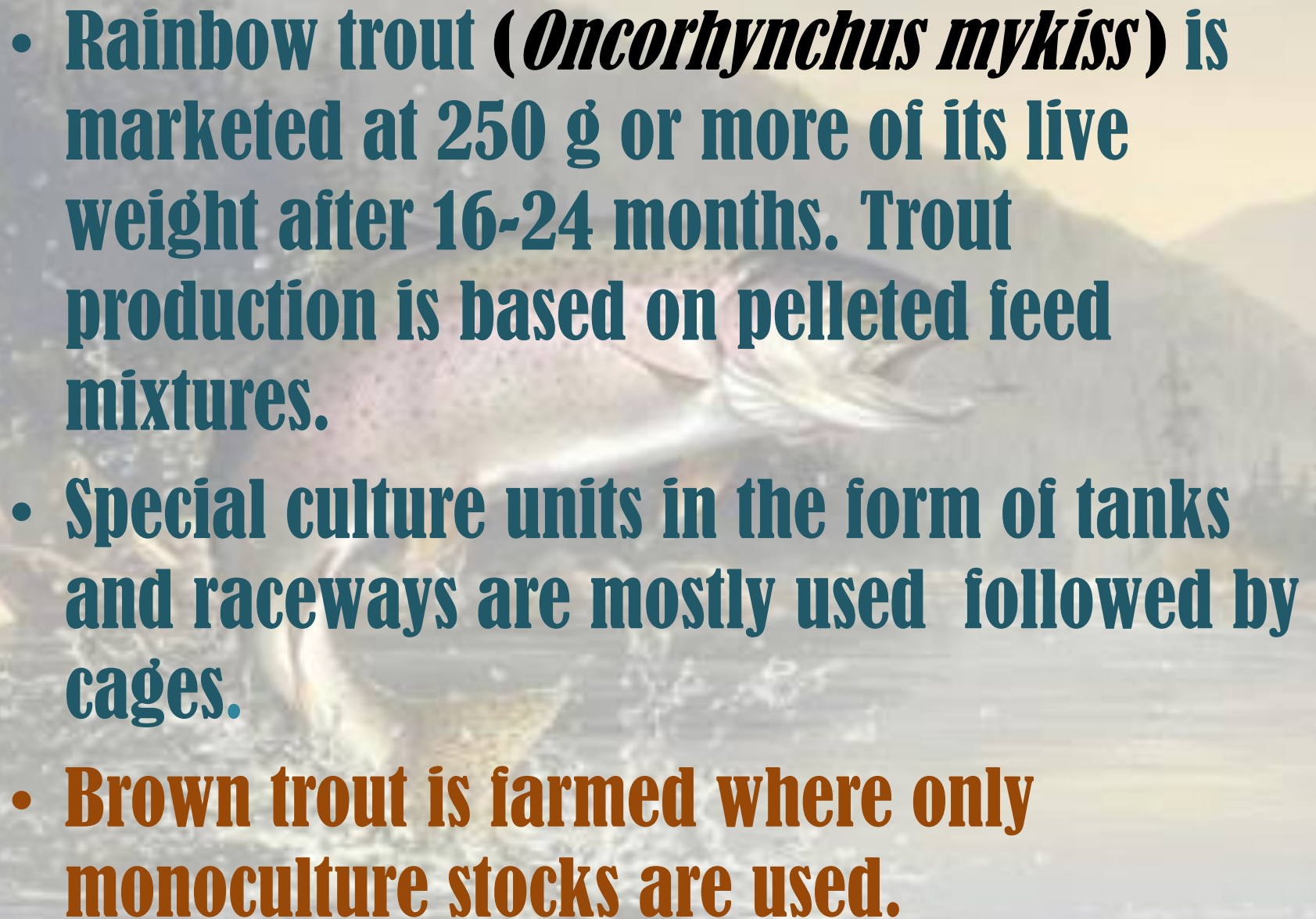
- The **first report on pond building** on Slovak territory dates back to the **12th century**.
- In the **17th century** the **well-known mining ponds - tajchs - near Banská Štiavnica city** were built and are still used today for fish husbandry (and for swimming - beautiful clear water).
- A dynamic development of the Aquaculture sector took place in the **second half of the 20th century**.

5) Two of the most common fish

- In Slovakia fish farming consists of both **salmonid (cold-water species) production**, mainly **trout** (+ **grayling** lípan, **sterlet** jeseter), and **cyprinid (warm-water species) production**, mainly **carp** (+ **predatory fish species**, such as **northern pike**, **zander** candát and **wels catfish**).
- Production is based mainly on **rainbow trout (70 percent)** and **carp (30 percent)**. The remainder is made up of **predatory fish**, **Chinese carps** and **other fish species**.

- **Earthen ponds are used for common carp and special culture units are used for brown trout (FAO).**



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- **Rainbow trout (*Oncorhynchus mykiss*) is marketed at 250 g or more of its live weight after 16-24 months. Trout production is based on pelleted feed mixtures.**
 - **Special culture units in the form of tanks and raceways are mostly used followed by cages.**
 - **Brown trout is farmed where only monoculture stocks are used.**

Brook Trout

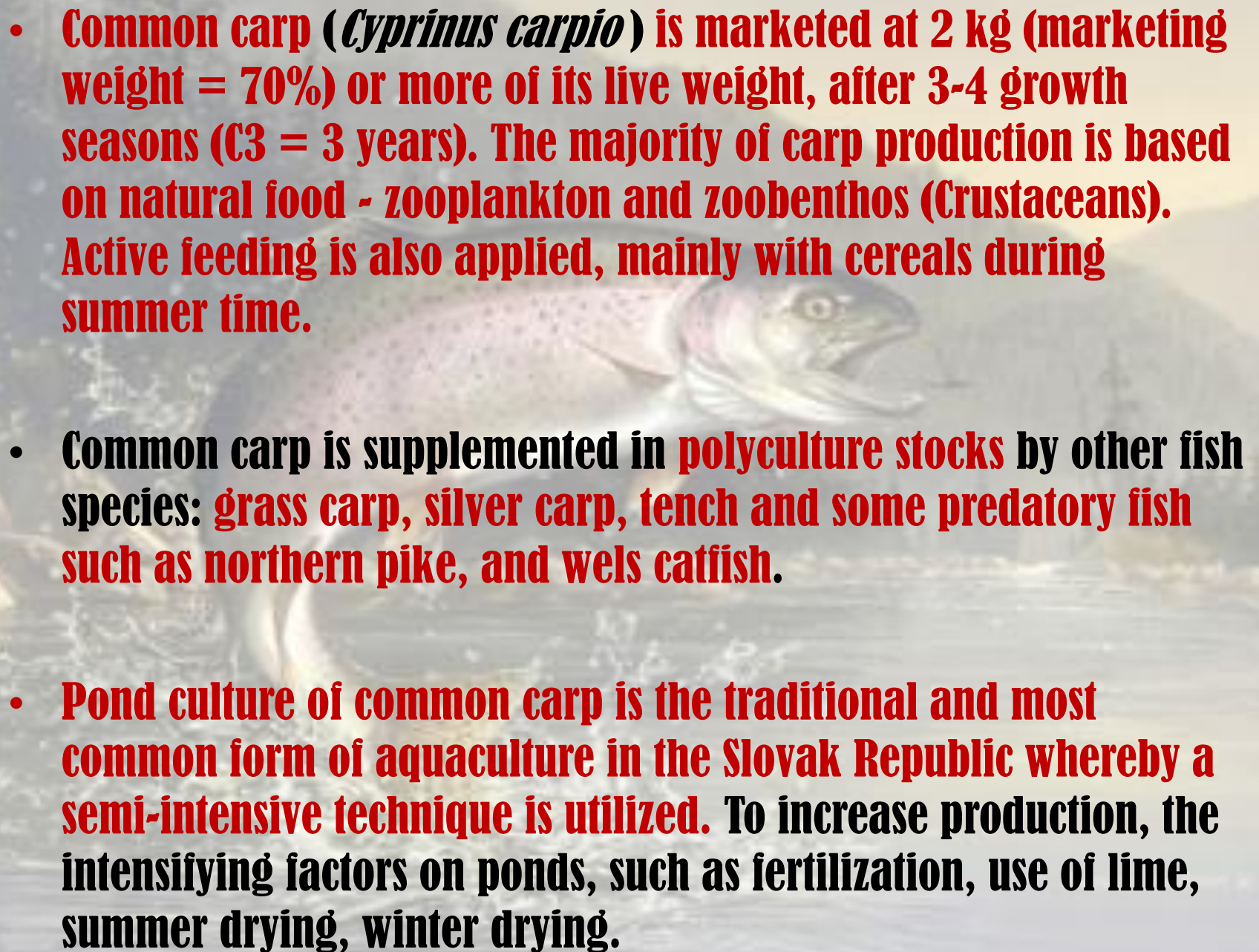


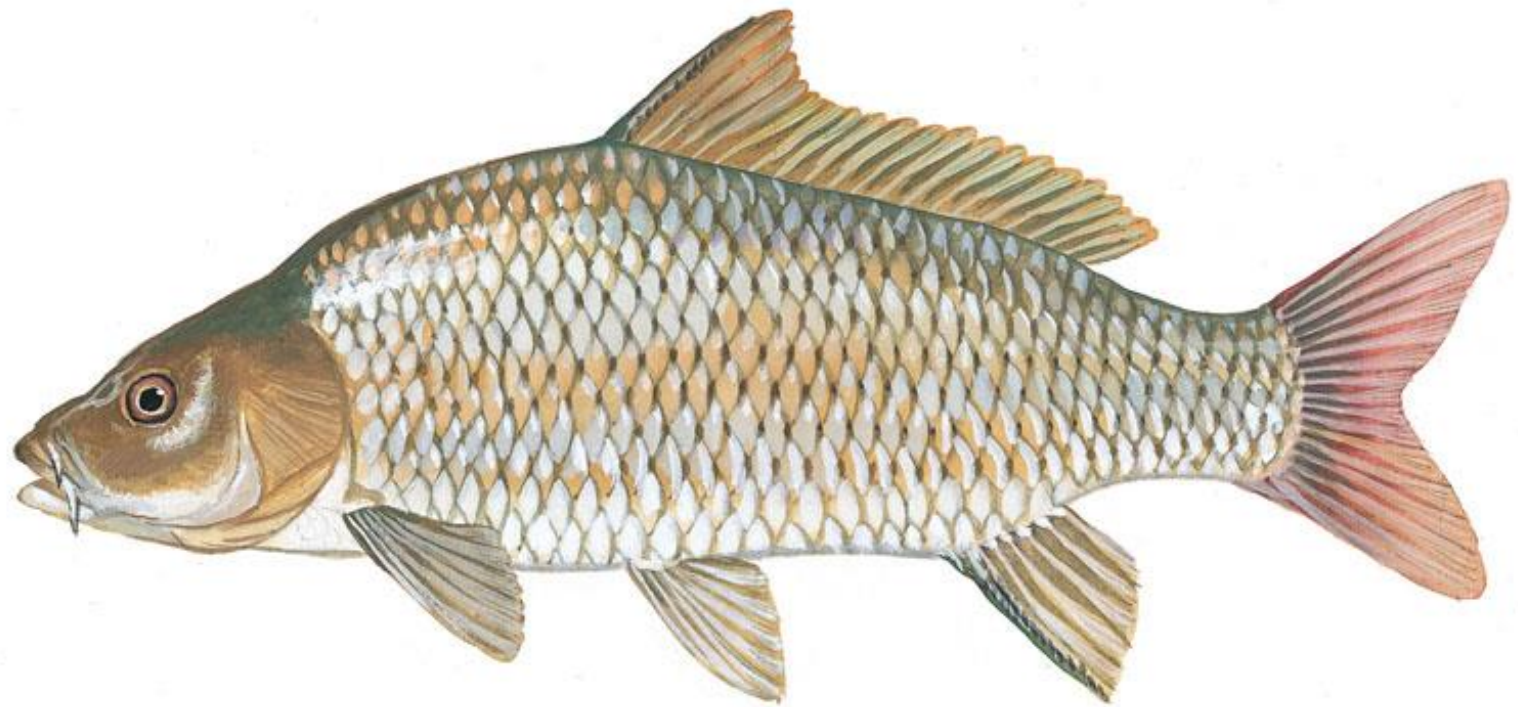
Rainbow Trout



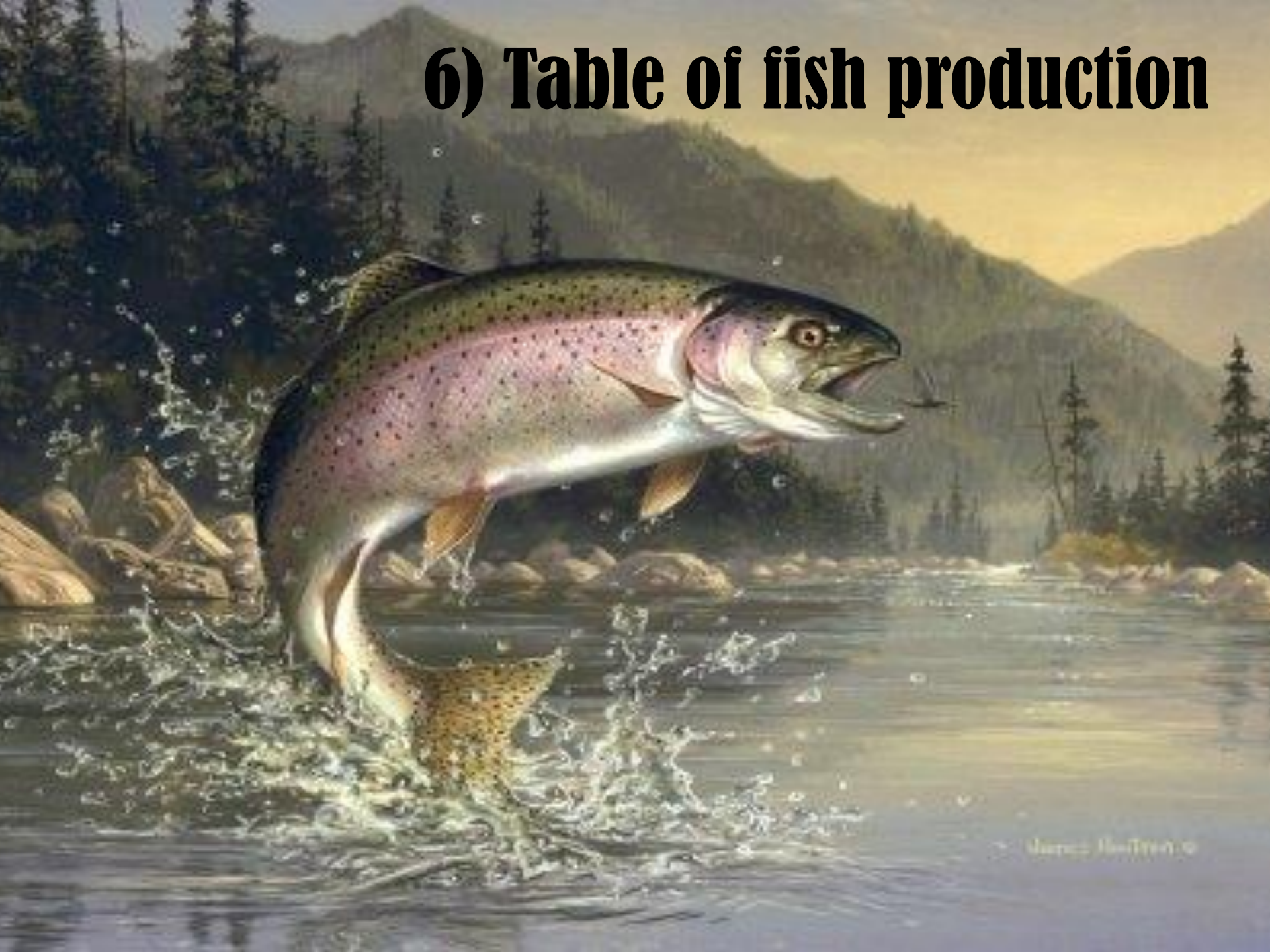
Brown Trout



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- **Common carp (*Cyprinus carpio*) is marketed at 2 kg (marketing weight = 70%) or more of its live weight, after 3-4 growth seasons (C3 = 3 years). The majority of carp production is based on natural food - zooplankton and zoobenthos (Crustaceans). Active feeding is also applied, mainly with cereals during summer time.**
 - **Common carp is supplemented in polyculture stocks by other fish species: grass carp, silver carp, tench and some predatory fish such as northern pike, and wels catfish.**
 - **Pond culture of common carp is the traditional and most common form of aquaculture in the Slovak Republic whereby a semi-intensive technique is utilized. To increase production, the intensifying factors on ponds, such as fertilization, use of lime, summer drying, winter drying.**



6) Table of fish production

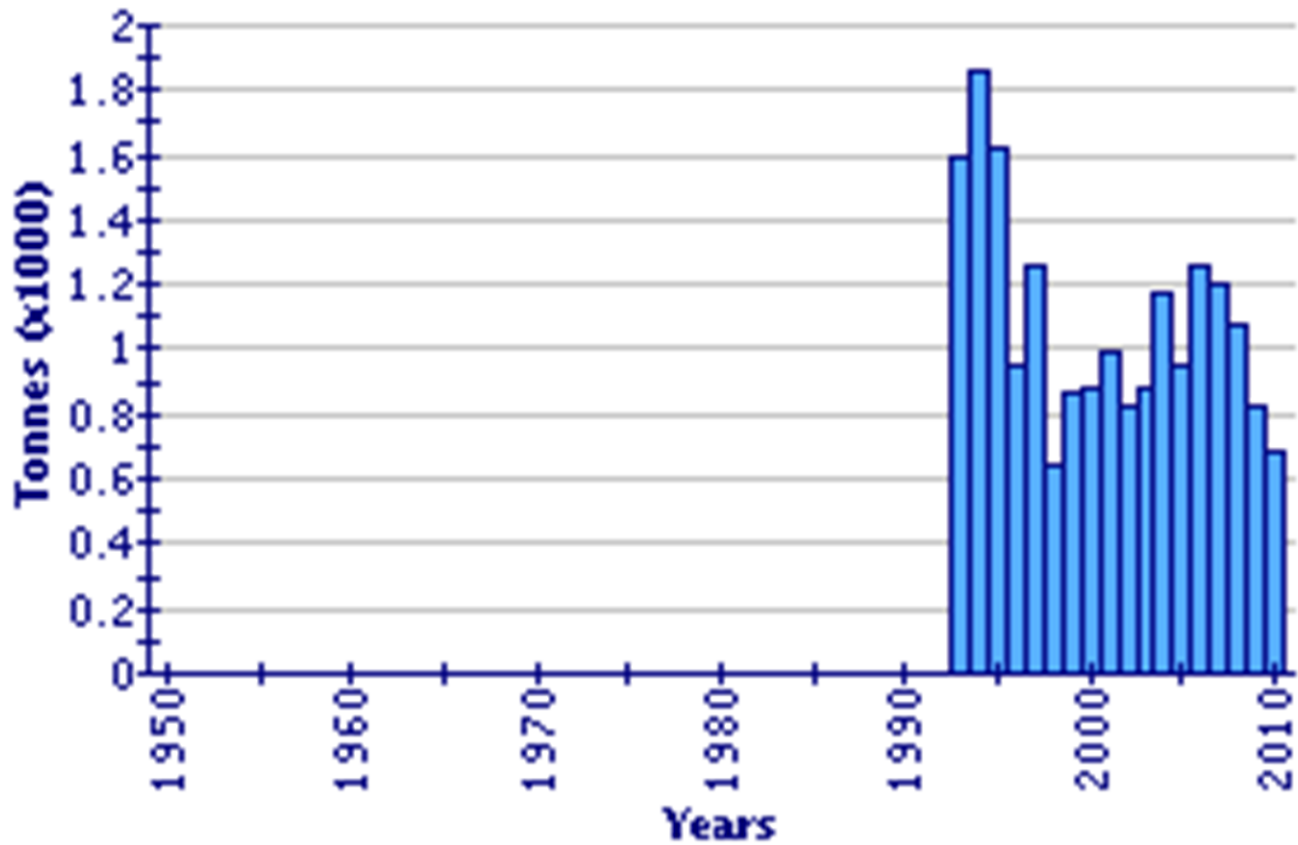


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Species	Year				
	2000	2001	2002	2003	2004
Rainbow trout	751.99	689.76	634.34	681.9	818.01
Common carp	74.14	125.95	153.6	139.31	344.82
Prussian carp	22.75	17.6	18.05	29.34	4
Bighead carp + silver carp	21.96	22.38	11.51	6.04	2.89
Grass carp	1	2.2	1.07	2.22	0.12
Northern pike	0.42	0.79	1.08	3.52	5.13
Zander	0.15	0.2	0.21	0	0.24
Wels catfish	0.3	0.22	0.39	0.66	0.28
Brook trout	14.1	9.84	5.45	0.7	0.44
Other species	0.56	0	4.41	16.55	4.99
Total	887.37	868.94	830.11	880.24	1 180.92

Table 1. Production of cultured fish species (in tonnes) during 2000-2004

Source: Statistical Office of the Slovak Republic, 2004



**Reported aquaculture production in Slovakia (from 1950)
(FAO Fishery Statistic)**

Source: FAO Fishery Statistics, Aquaculture production

7) The End - Conclusion

- **The outlook for increased production in the future is possible.**
- **A limiting factor to fish farming is the clash of interests between nature protection and fish farming.**
- **Trends, issues and development/ Factors of the future:**

Environmental protection
Fish production and processing of fish
Fish consumption and marketing
Training
Diseases (ISA virus! Fail of the goverment!)
Development

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Sources:

- <http://www.lek.estranky.cz/clanky/vodstvo.html>
- <http://www.fao.org/fishery/afris/species-profiles/common-carp/common-carp-home/en/>
- http://www.fao.org/fishery/countrysector/naso_slovakia/en
- <http://www.slovakiasite.com/sk/fauna.php>
- <http://www.fao.org/3/contents/fedd24e6-8e50-5f66-afdb-d69638313b30/T9216E00.htm>
- <http://www.fao.org/docrep/x5085e/X5085E04.htm>

😊!Thanks for your atention!😊

