

# The French restocking market for Percids

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# Objectives

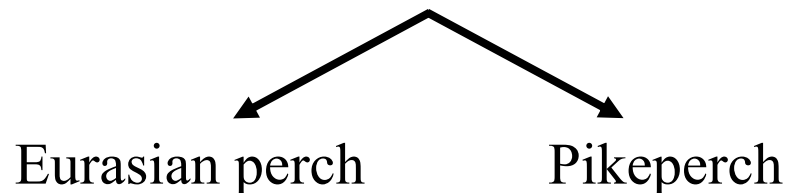
State of the art of the production and restocking of Percids in France



Using phoning contacts over the year 2007, a survey has been done among almost all French:

- fish farmers
- traders
- fisheries managers

=> 90 persons concerned by inland aquaculture.



# Presentation of Eurasian Perch

- ✓ Indigenous species in France
- ✓ Very appreciated for angling
- ✓ The restocking market concerns only fish  $> 100$  g
- ✓ Yearling juveniles => forage for other piscivorous species (pike mainly)



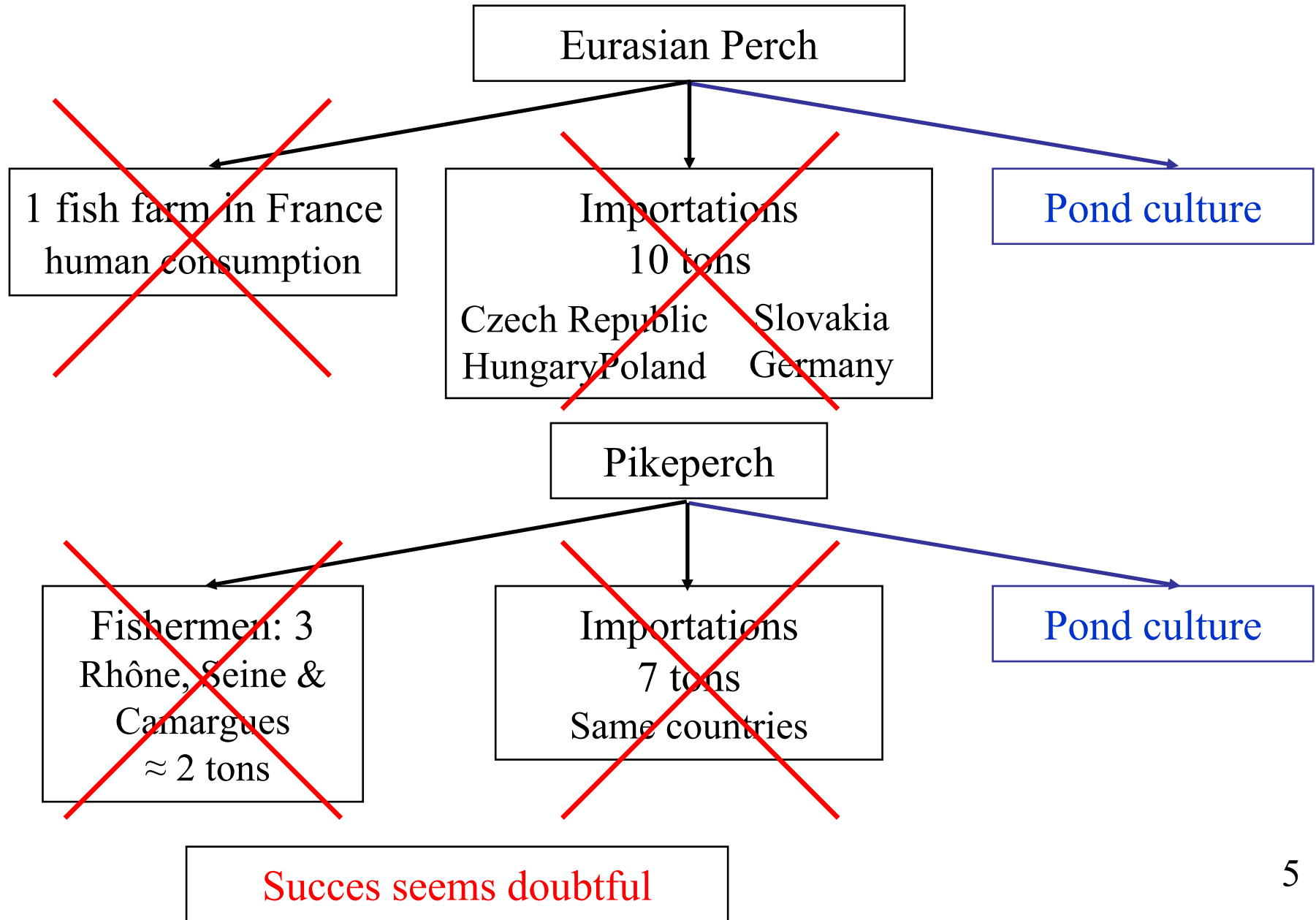
# Presentation of Pikeperch

- ❑ In France => considered as indigenous: 1<sup>st</sup> introduction in 1888
- ❑ In Switzerland => the restocking activity is forbidden
- ❑ In Luxembourg => the restocking level is limited to 3 lakes  
Closed areas: 2.000 fish/year  $\approx$  200 kg/year
- ❑ In Belgium limited introductions in public areas  
Due to sanitary fears (bucephalosis?)



In France its interest for angling very recent (10 years), increasing ↑↑

# The different sources of supply



# What are the main reasons

- Handling
- Transport
- Stress
- Physicochemical quality of water

Diseases/pathology

- Aeromonose

Saprolegna



Opaque cornea



# French production in pond culture

Focus on 3 main region of France

- ✓ Dombes
- ✓ Lorraine
- ✓ Brenne

54% of the production of perch



62% of the production of pikeperch



# Characteristics of pond production in France

	Dombes	Lorraine	Brenne	Total France
Pond surface (ha)	12.000	7.000	7.000	112.000
Farmed surface (ha)	7.000 <sup>1</sup>	5.000	6.000 <sup>2</sup>	68.000
N of anglers <sup>3</sup>	18.300	54.200	9.400	1.200.000
Pikeperch production (b.w. > 100 g) in tons	14	12	8	54
Perch production (b.w. > 80 g) in tons	8	18	12	70
Global pond production (tons) <sup>4</sup>	1853	1100	3000	12000

<sup>1</sup> only Ain Department

<sup>2</sup> only Indre Department,

<sup>3</sup> Le pêcheur de France, May 2007

<sup>4</sup> Itavi 1997

# French production in pond culture

- ❑ The Dombes => 1<sup>st</sup> French region for pikeperch production
- ❑ This production seems highly related to the use of:  
*Pseudorasbora parva* as main forage fish
- ❑ They can produce => 2+ fish > 800-1000 g vs 3 summers in Lorraine
- ❑ The mean weight of 1<sup>+</sup> pikeperch varies
  - ❖ 30-100 g in Lorraine
  - ❖ 60-150 g in Brenne
  - ❖ 100-250 g in Dombes



# Estimated demand in France

The number of anglers highly decreases in France

↓ 30% over 10 years

↓ 5% between 2006 and 2007

Yet, the # of anglers concerned by piscivorous species ↑ : pikeperch

All persons surveyed estimate that:

An increase of their production of perch or pikeperch by 2 or 3 is possible without any problem for commercialization

=> The potential market for both species 100-150 tons/year

# Possible market in France

The development of these productions will be possible if the price remain high

For pikeperch

- As it seems that this species consumes more forage than pike (9 €/kg)
- The price difference between these two species must be maintained
- The pikeperch price ↑ progressively these last 5 years up to 20 €/kg.

	1000 larvae	1 <sup>+</sup> fish	Adult
Perch	8-10 €	3-4 €/kg	5-8 €/kg
Pikeperch	11-14 €	1.5-2 €/kg	13-16 €/kg

These prices vary according to the regions

# Main problems

For fish farmers, the main problems to develop Percid production for the restocking markets are:

1. A high variability in production performances between years
2. 1<sup>+</sup> fingerling less than 13 cm often starve in autumn and died winter

Optimal pond  
fertilization

Add forage fish

*Pseudorasbora parva*

Stone moroko



*Leucaspilus delineatus*

Belica



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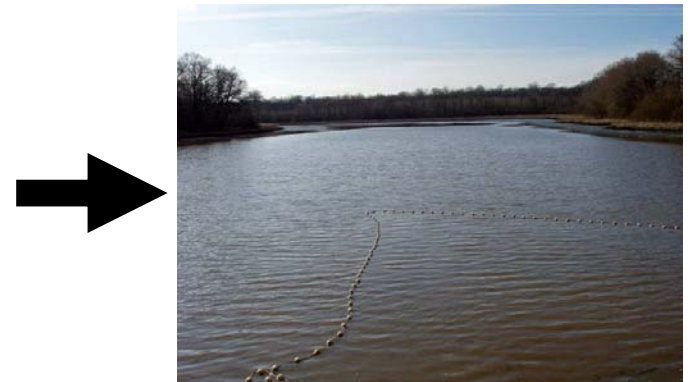
## 3. The sensibility to transport and handling

2 ‰ of salt in the transport tank

Traditional methods



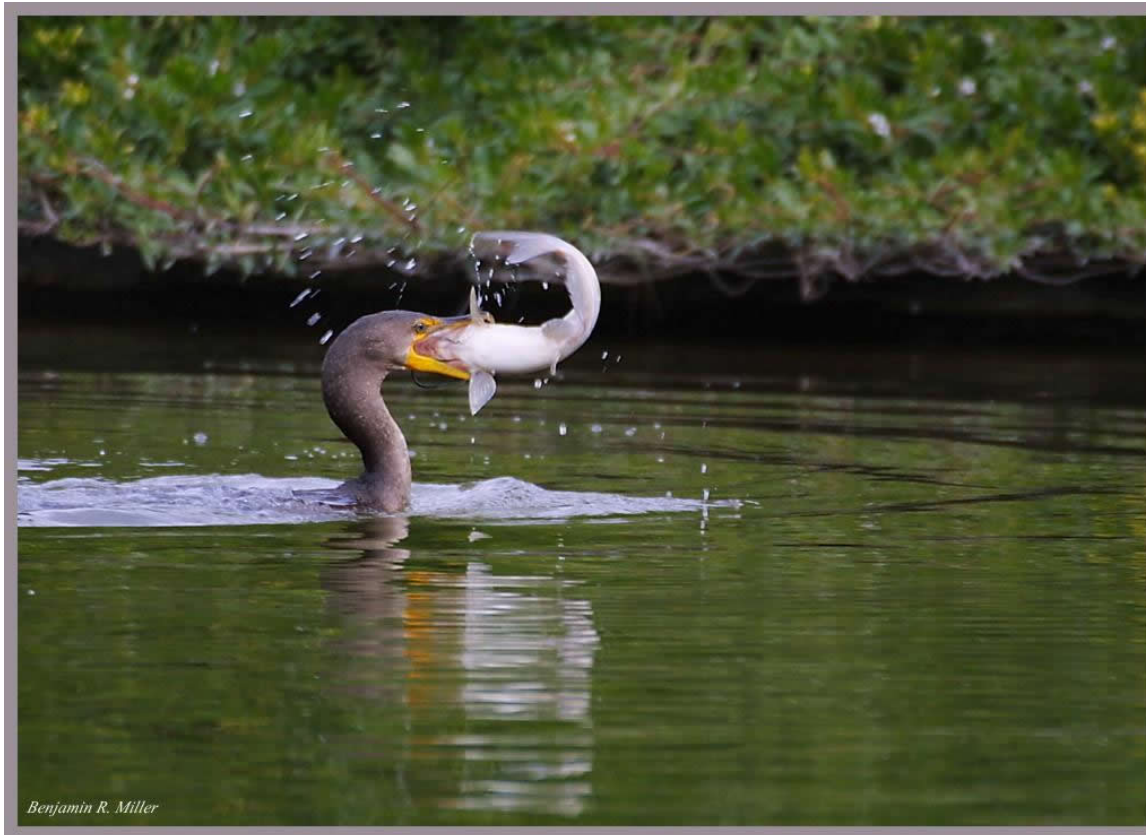
Netting in full water



# Main problems

For fish farmers, the main problems to develop Percid production for the restocking markets are:

4. The impact of predator birds like cormorants



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**Thank you for your attention**