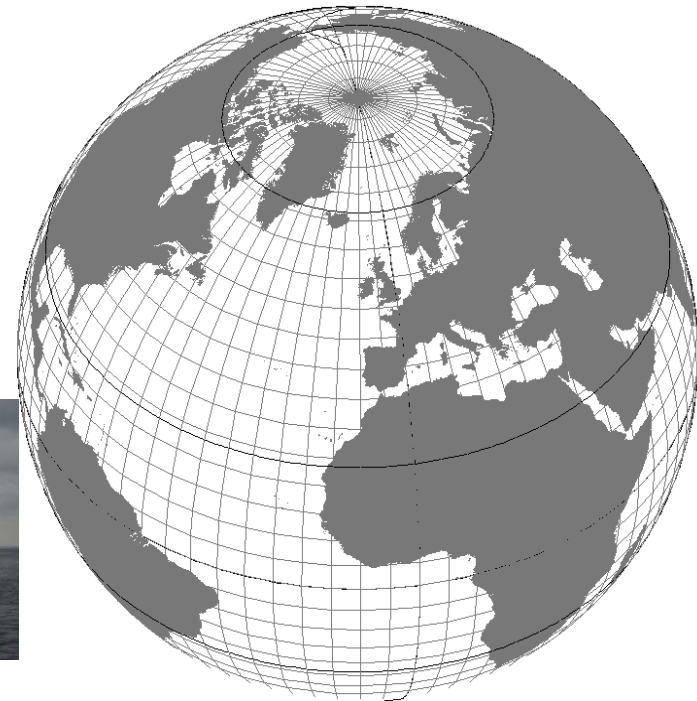
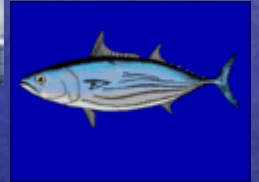


La pesca del tonno nella Francia Atlantica e Mediterranea, fra tradizione e innovazione



Una volta...

*la storia de la pesca francese del tonno the
in Atlantico ed in Mediterraneo*



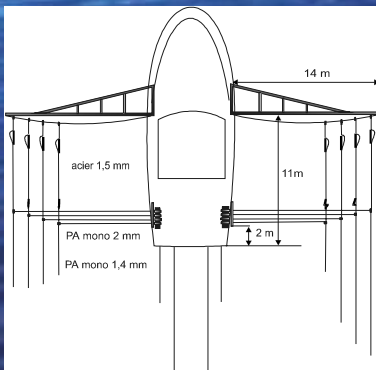
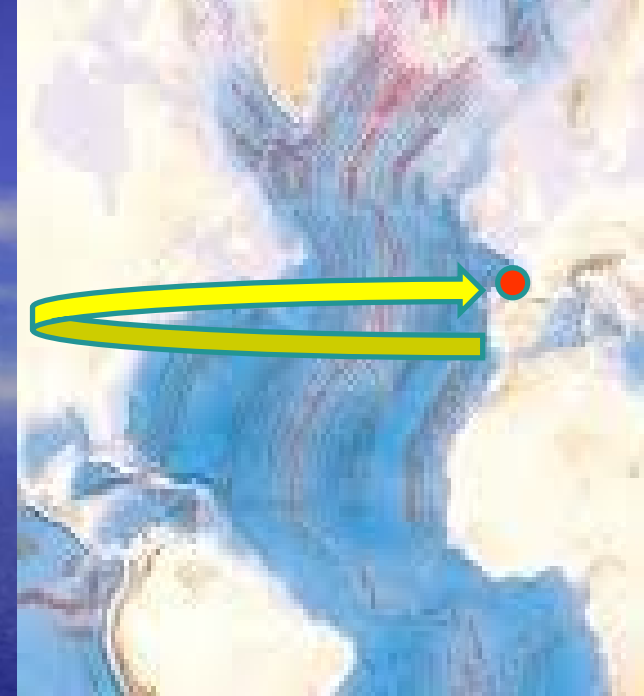
La pesca del tonno rosso: Biscaya - i precursori



Txakupa handi



1949 Bluefin tuna fishery



Trolling

Pole & line
Guy de la Tourasse 1957.

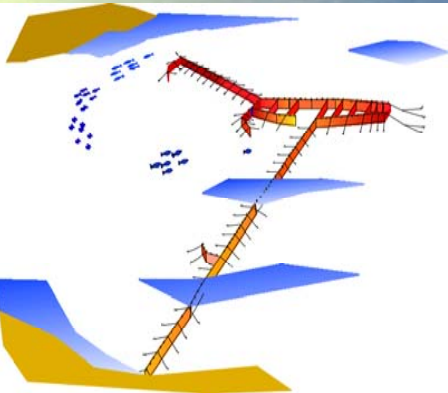


steam

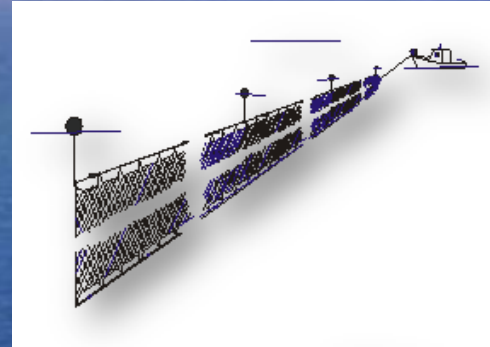
Provence e Golfo de Leon Una storia di immigranti



Drift netting
« thonaille »



Trap (16 - 17th
century)



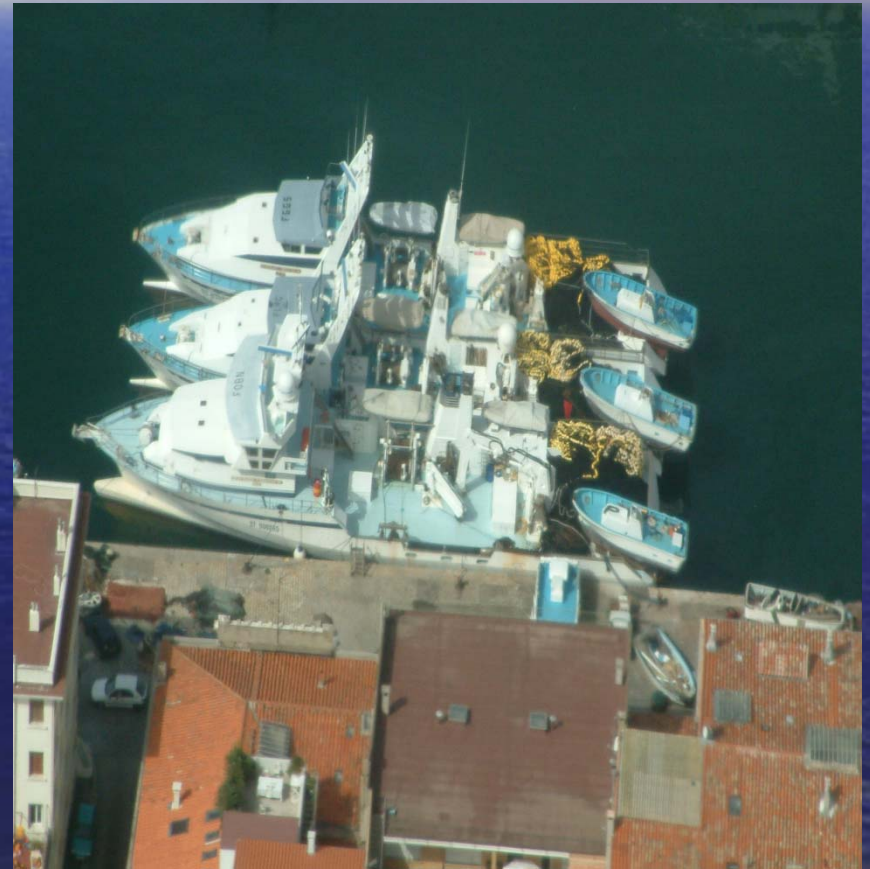
Encircling gear
« seinche »



Purse seine (since the 60's)

Principali fattori dello sviluppo de la pesca francese de circuizione

- Tradition & modernism
- Familial structure
- Collective effectiveness (competition & association,)
- A constant adaptation of strategies & tactics face to the market demand and external constraints
- Development policy(Subsidies)

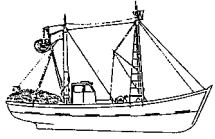


Obiettivi del progresso tecnologico

- Information & fish detection
- Fishing efficiency (operation & catch)
- Fish quality and handling
- Safety and welfare

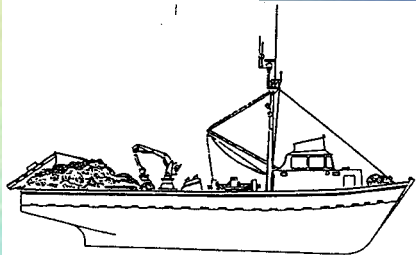


Evoluzione generale delle caratteristiche della nave



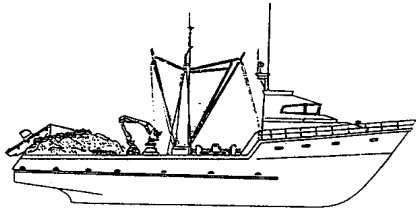
a- 1960, 18m., 200 ch

1960 - 16 m - 200 ch - wood



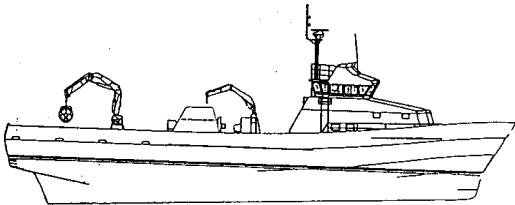
b- 1973, 25m., 430 ch.

1973 - 25 m - 430 ch - wood



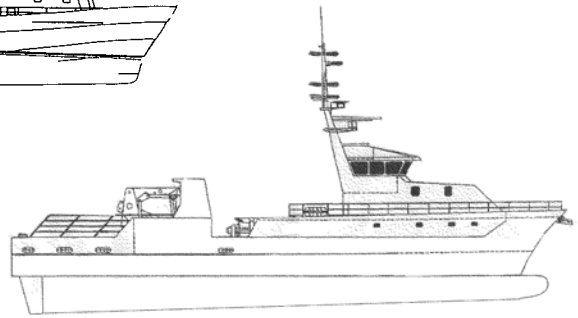
c- 1978, 27m., 600 ch.

1978 - 27 m - 600 ch - composite, steel



d- 1986, 35,60m., 1600 ch

1986 - 35 m - 1500 ch



2005 - >40 m - 3500 ch - steel

2004 - 40 m - 3500 ch

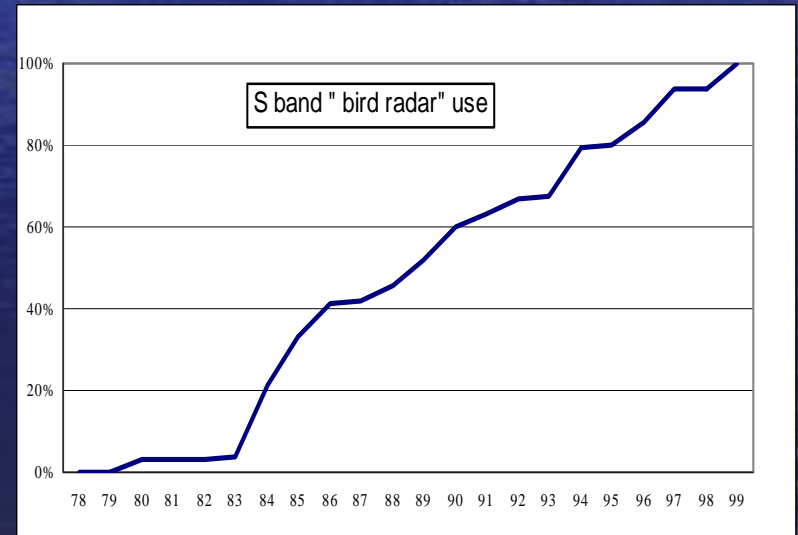
Attrezzatura de prospezione

• *Airplane*



- Scanner and scrambler radio
- Satellite informations & communications.

Attrezzatura de individuazione- Bird Radar

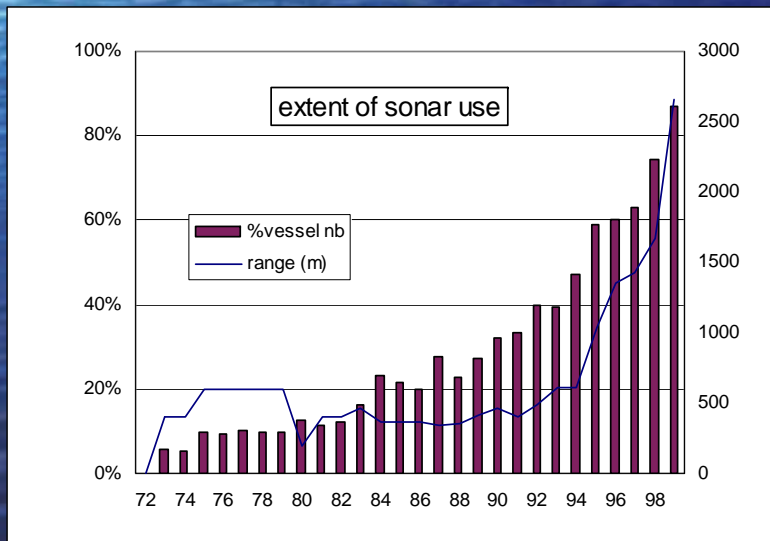
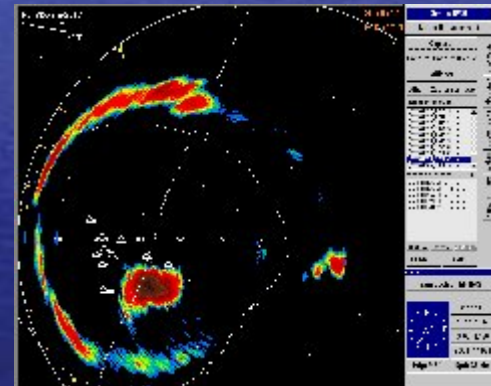


• *Birds Radar S band (30 kW)*

Attrezzatura de individuazione– Sonar

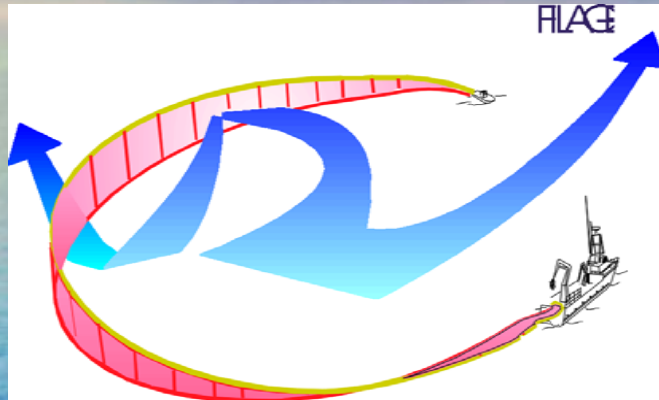


1971

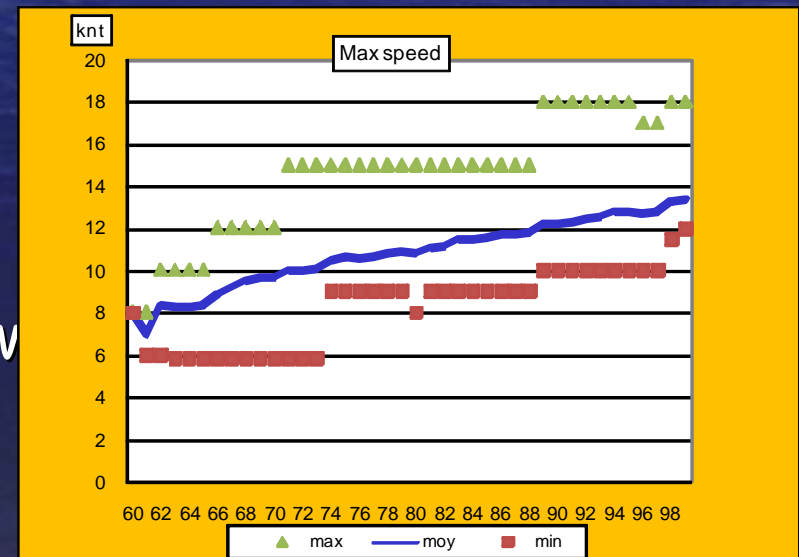


Sonar : from 300 (end of 70') to 3500 m range low frequency (20 to 30 kHz)- "catch beam"

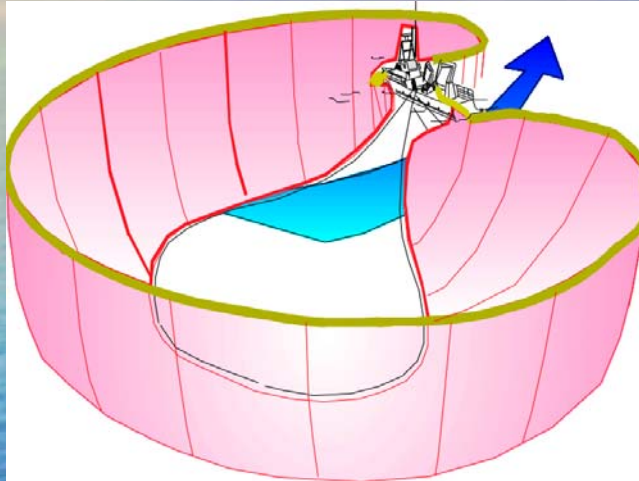
Setting & max speed



- Speed: 15 to 18 knots.
- Thanks to floating length vessel and speed bulbous bow
- Duration: 4 to 5 min.



Pursing

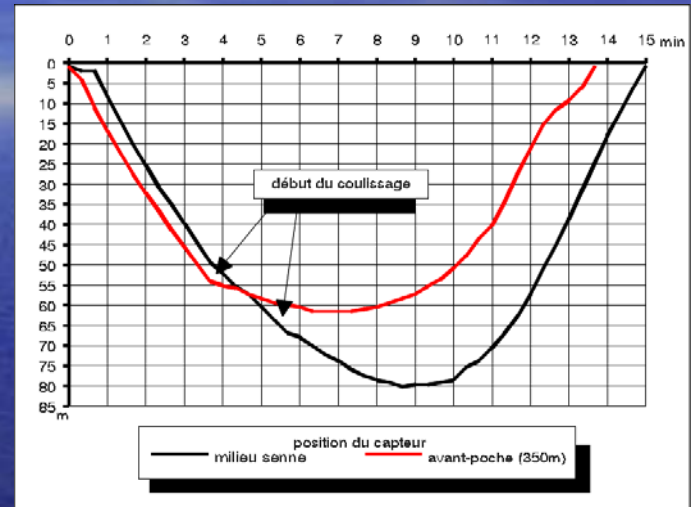


- Duration: from 20 min (70's) to 15 min.

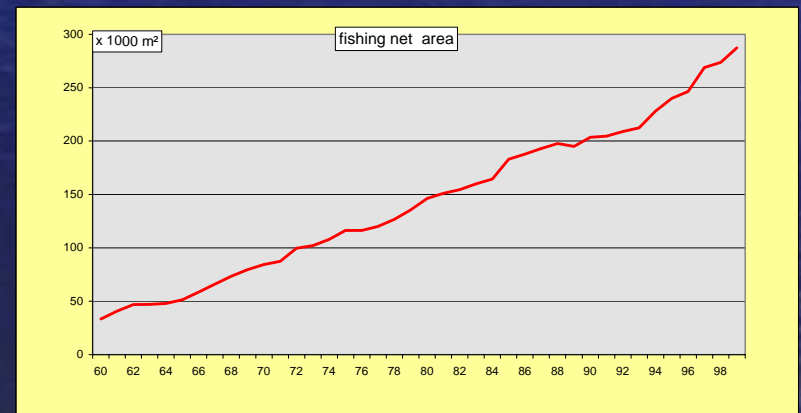
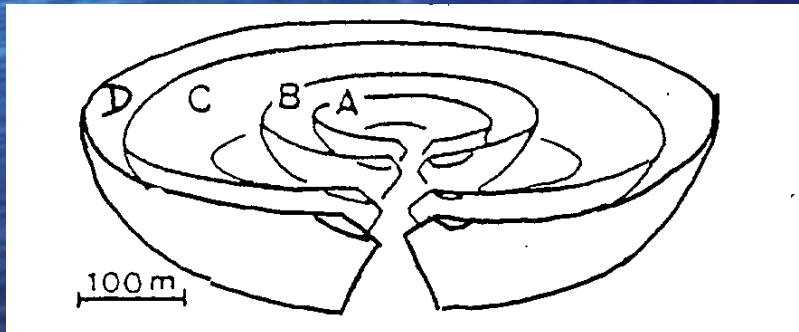


Evolution della rete

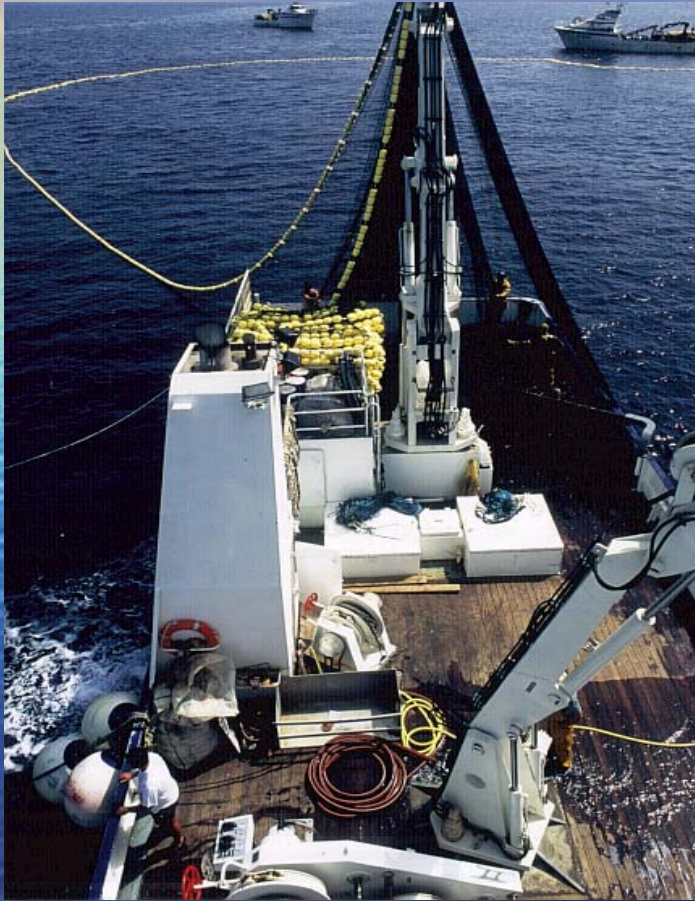
Year	Length	Height
1962	570m	60m
1972	800m	95m
1992	1400m	220m
1996	1800m	230m
2000	1900m	230m
2004	2000m	250m



• Depth reached 50 to 180 meters



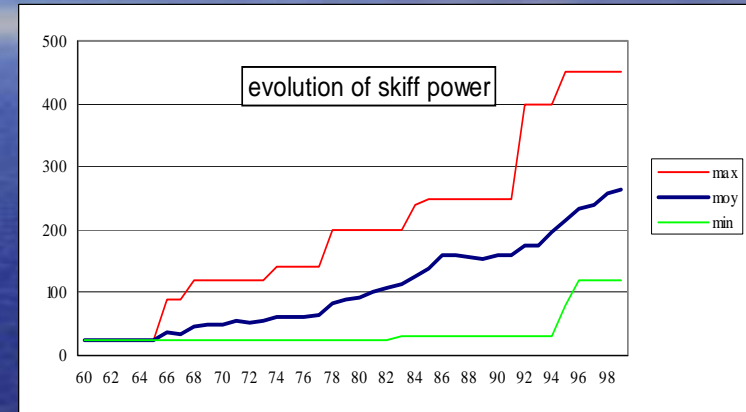
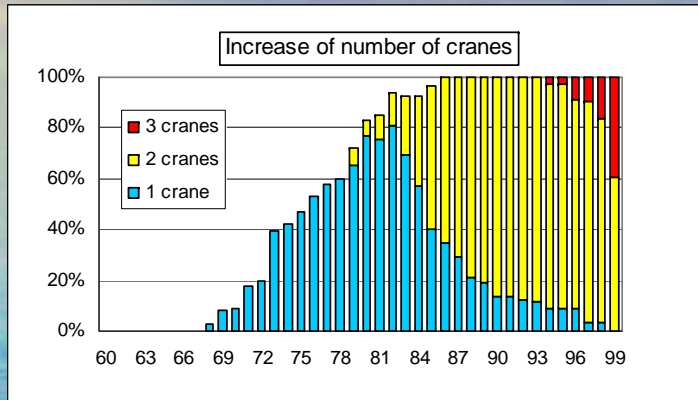
Relevage della rete



- Duration 40 to 60 min
- 12 crewmen
- Skiff and thrusters



Attrezzatura del ponte di pesca



- Hydraulic crane for power-block (1973)
- 2 Side thrusters (1990)
- 1 Skiff & gangway
- speed propeller



Recupero della cattura

• From the bag...



• ...to the hold



• Duration depends on catch and fish sizes and type of product



... or to the cage

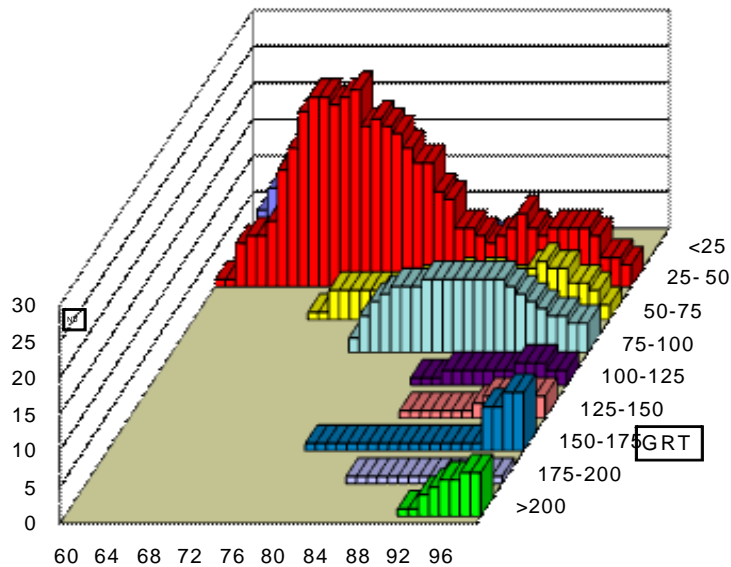
Landing operations

- A long way from the boat to the consumer
- By truck, by freezer vessel to wholesaler area
- Since the end of 90's pull into cage to tuna penn

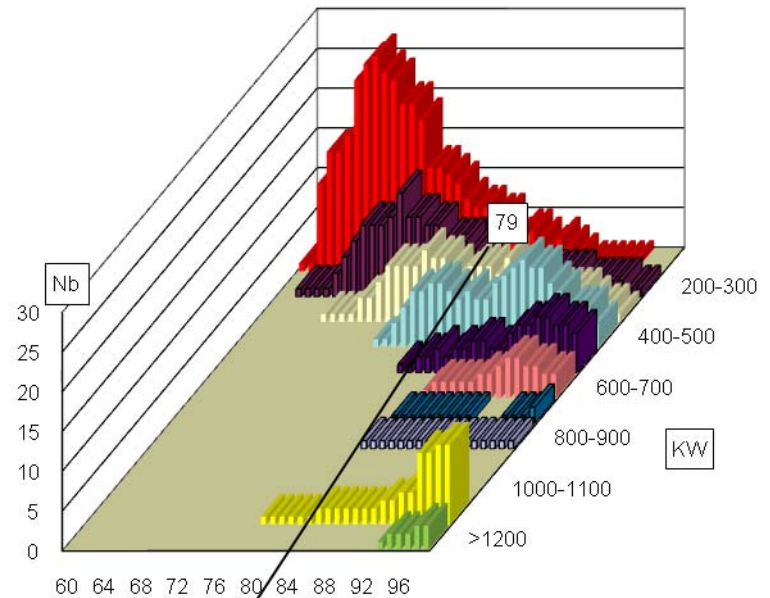


Conseguenze del progresso tecnico sulla capienza di pesca

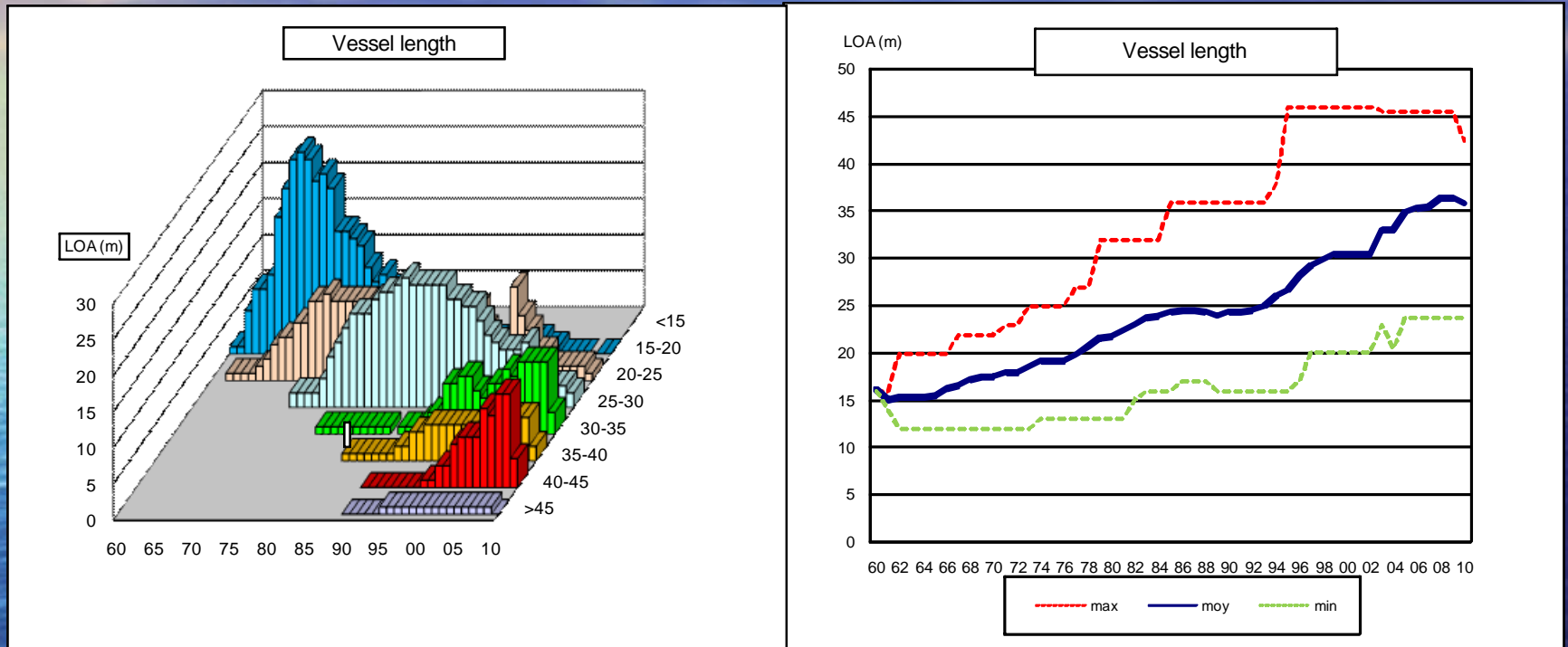
Vessel tonnage



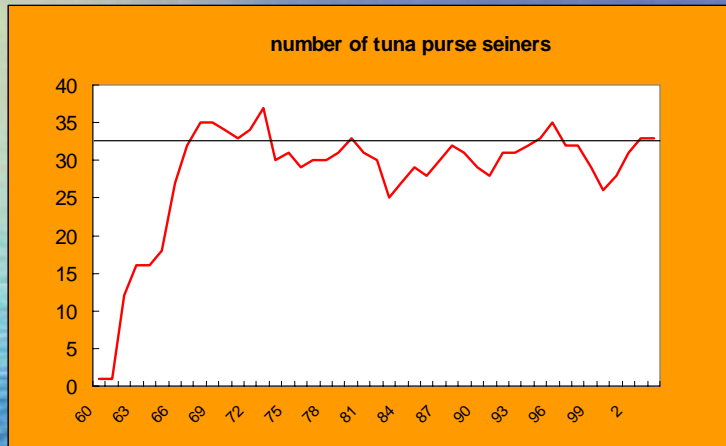
Main engine power



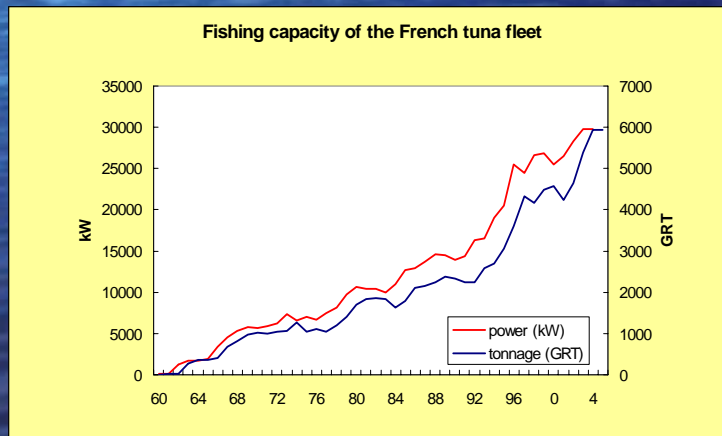
Conseguenze del progresso tecnico sulla capienza di pesca(2)



Conseguenze del progresso tecnico sulla capienza di pesca

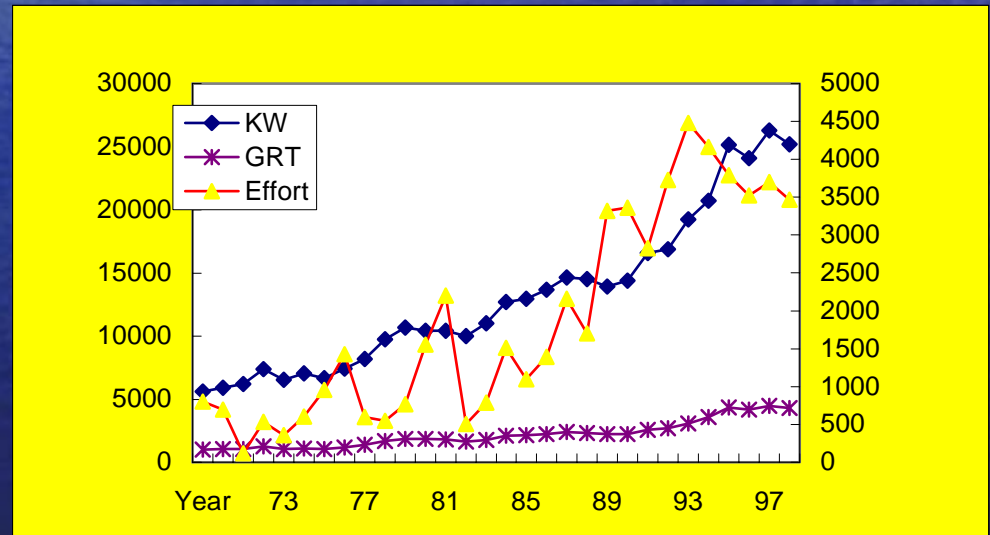


- Until now Relative stabilization of number of fishing units thanks to a license system
- Strong increase of capacity of the fleet since the beginning of the 90'



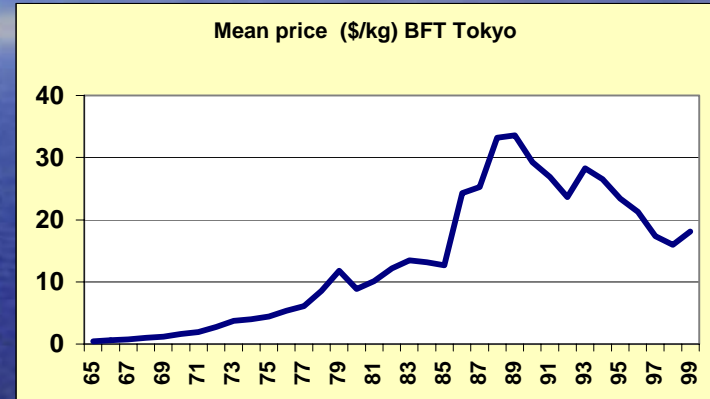
Aumento di l' efficacia di pesca

- Less fishing days,
- More positive shots
- Thanks to the increase of general nominal capacity of the fleet



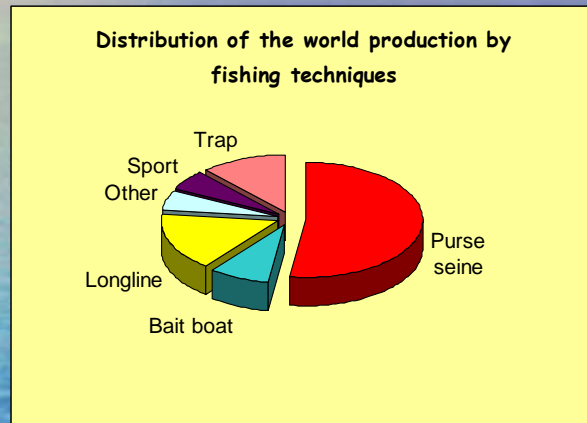
Influenza ed evoluzione del mercato

- ✓ Until 70 's fresh national market and canning
- ✓ Until 80's deep freezing for national and european market
- ✓ Since the 1980 's, exportation to Japan for sushi and sashimi market)
- ✓ Until 90's, exportation by freezer vessels and air cargo
- ✓ Since 95's, development of tuna ranching



il mercato delle tonno rosso

Importanza della pesca del rete de circuizione



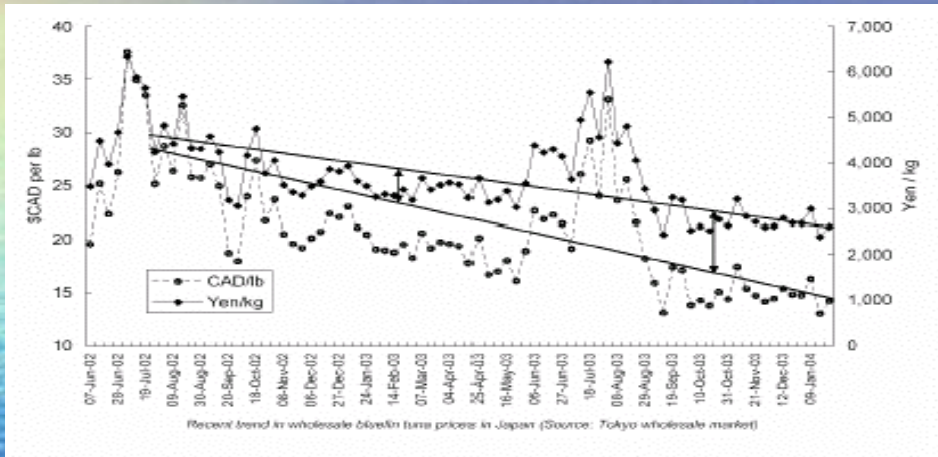
Purse Seiner	
Production:	6,500 tonnes*
Av. price:	6.50 €/kg
Fleet:	94 units
Employment:	407 FTE
Total Value:	€M 42.3
GVA:	€M 26.5
Zone:	MED



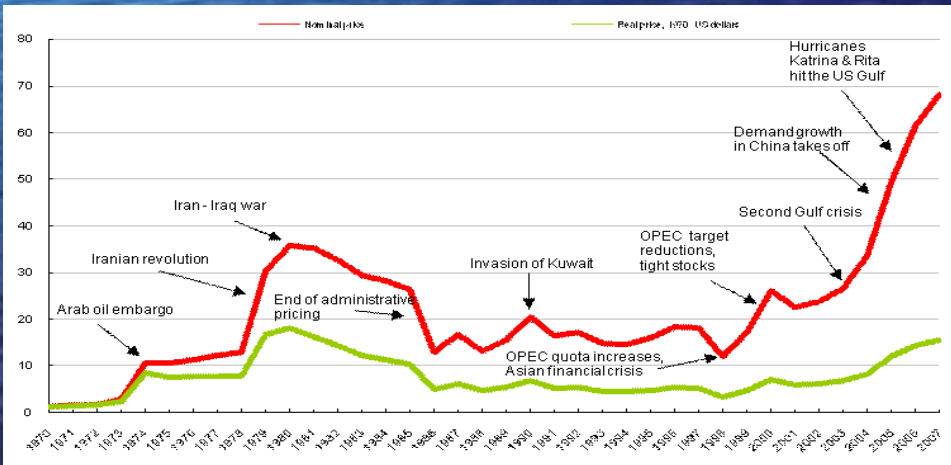
Farming/ Fattening	
Stock held:	9,000 tonnes
Av. price:	€ 15 / kg
# of Farms:	16 units
Employment:	427 FTE
Total Value:	€M 134.9
GVA:	€M 40.5
Zone:	MED

Difficulta economica

- the rapid development of the caging technique has led to a substantial increase
- in supply of bluefin tuna and growing market competition



- Asian Currencies fall
- Japanese Consumption drops 2004, average sale price in Japan has gone down by as much as 60 %
- Quotas limitation 12000 t to 6500 t
- Increase of gasole price of more 30% per year for 5 years - 10% (90's) to 20 % of annual turnover of tuna purse seiner)
- Catch reductions must to be anticipated

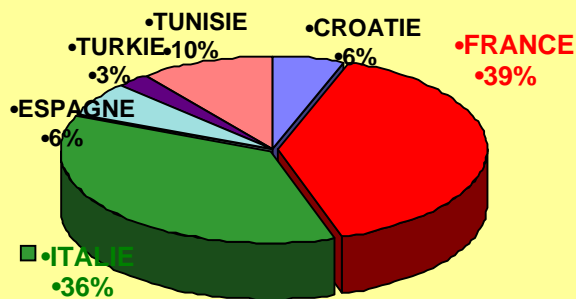


Status of the French purse seining fleet to day

- Until 2008,
 - 36 purse seiners
 - 39 % of Med purse seine landings
 - 80 % to tuna farm
- 2010,
 - 17 purse seiners
 - 1 month of fishing
 - 1 699 T of quota

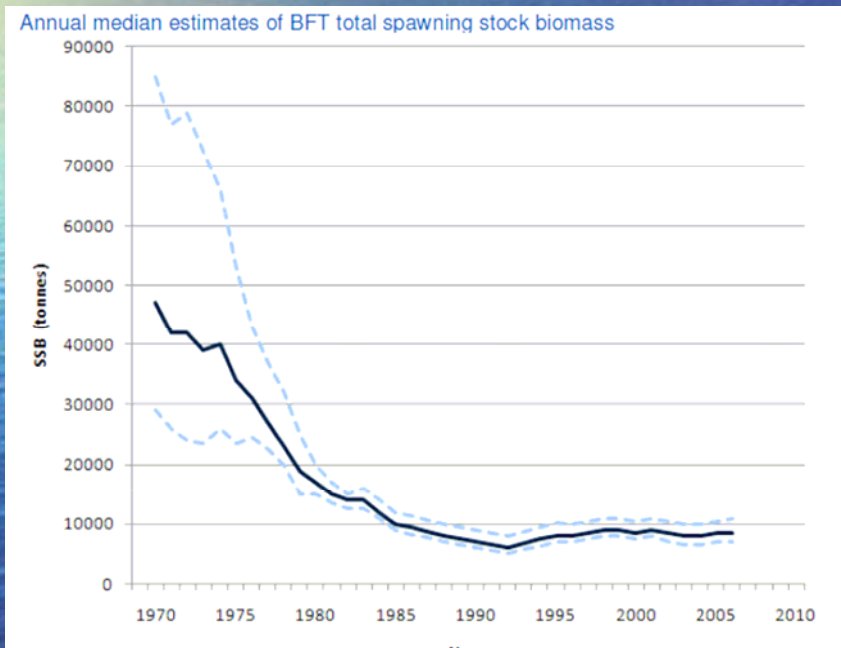
• Mediterranean purse seining

Distribution by countries



Estimation of Bluefin tuna status

- spawning stock biomass (SSB) has been declining rapidly over the last several years,



From SCRS 2009

Conclusione : una bella storia che finisce male ?

- ✓ Uncertainties for the future
Fleet capacity is greater than
the stock's reproductive
capacity
- ✓ Overfishing and depletion
risks
- ✓ Thread of ban
- ✓ Need of better management
- ✓ Serious need of knowledge of
some biological and ecological



***grazie per la vostra
attenzione***

