


# Atlantic blue crab (*Callinectes sapidus*) – Environmental emergency

## Evolution

- ❖ Alien species (Atlantic).
- ❖ First report about 10 years ago (for many years only few specimens have been found).
- ❖ Invasion from early summer 2023, after a winter drought and a late spring flooding.
- ❖ Mainly in the Po river delta area.
- ❖ Increased harvesting capacities to try to control blue crab population (crab traps). Harvest July-October 2023 of 831 tons. Current harvesting of 5-6 tons/day (1-2 tons during winter months even with low temperatures).
- ❖ Current blue crab population is forecasted to be higher than last year.
- ❖ High impact on the whole ecosystem and on manila clams farming.
- ❖ Ongoing trials to protect some areas from the crab (enclosures) and new spat introduction to restore stocks. First results are not expected before the end of this year.
- ❖ Further damages due to Po river continuous overflow during last two months (impact also on mussel farming in lagoon areas).

## Clams farming

- ❖ Manila clams (*Ruditapes philippinarum*).
- ❖ On bottom cultivation.
- ❖ Previous production between 20.000 and 25.000 tons/year.

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- More than 90% of farmed manila clam stocks destroyed.
  - Increasing blue crab harvesting capacity.
  - Until now, blue crab harvesting did not contribute to reduce populations.
  - Reduced biodiversity.

## Atlantic blue crab (*Callinectes sapidus*) – Social emergency

- ❖ State of emergency declared & first surveys (Agriculture minister, ISPRA and ARPAV).
- ❖ More than 1.500 enterprises concerned (mainly individual enterprises organized in cooperative/PO), which 700 perform only clams bottom cultivation, while other grow mussels o have coastal fishing activities.
- ❖ Harvested crabs and their disposal normally paid by the cooperatives/PO on their financial availability, but they won't be able to carry on paying over the end of this year (0,50 €/kg paid to farmers and fishermen and 0,10-0,20 €/kg paid for disposal).
- ❖ In 2023, funding to buy blue crab traps and to enclose some production areas.
- ❖ During the last 3 months, funding to pay the harvested blue crabs to farmers and fishermen (1,00 €/kg). Cannot be used again (De minimis mechanism EU rules).
- ❖ Possible access to Agriculture sector subsidies to cover reduced turnover in case of emergency: eligibility when turnover is inferior to a defined percentage of the average turnover of the 3 previous years ==> available from 2025.
- ❖ Possible access to non-employment subsidies depending on enterprises/workers statute (only in some cases).
- ❖ Possible use of EMFEF (not before 2025) for investments in:
  - fishing devices if the current strategy demonstrate to be effective in reducing blue crab populations
  - new farming device if solution are found.

- 2023 turnover for clams farming reduced by 30% (lower harvest and higher price).
- 2024 turnover for clams farming expected to be lower than 20% of the average turnover before blue crab emergency.
- Long time and difficulties to access funding and subsidies.

# Atlantic blue crab (*Callinectes sapidus*) – Urgent need for research



## Biology

- ❖ Predator feeding on benthic organism, mainly on bivalves.
- ❖ Euryhaline specie (range 2-48 g/l). Need of fresh water for breeding.
- ❖ Eurytherm species (range 3-35°C).
- ❖ Sexual maturity after one year.
- ❖ High fertility: 700 000 – 8 000 000 eggs / female depending on size.
- ❖ Po river delta: perfect conditions for reproduction.
- ❖ Life span of 3-4 years. Few predators.

## Lack of scientific knowledge & urgent need for research

- ❖ On reproduction patterns.
- ❖ On blue crab population assessment (caught product is not a reliable indicator because depending on numerous factors like available fishing devices and price paid).
- ❖ On possible new farming technologies for clams.
- ❖ On blue crab valorisation (low meat content) (highly appreciated in USA).

## EU level

- ❖ EU institutions informed of the emergency and waiting for more data from Italy.
- ❖ Evaluate “Horizon project” (learn from previous similar emergency)
- ❖ AAC recommendation-

## ➤ Need for research (Horizon project)

- blue crab population assessment.
- new farming technologies
- blue crab valorisation

## ➤ ACC recommendation

