

# The role of PAs for the maintenance of our best food sources: breeds, fish, crops

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**Protect what you eat; conserving our food's genetic resources**

# PAAs: the «living fridges»

## Ecological role

PAAs are the places where the ecological processes can develop more naturally and successfully. Plants, Animals, Herbivores, Carnivores, Scavengers, Minerals, Water act and interact within the natural functioning of the Ecosystems.

## BUT

PAAs are also places where Ecosystems Services and human activities take place. Agriculture and, in most natural or difficult contexts, animal husbandry, are fully sustained by natural and ecological balanced resources and processes.

## Socio-Economical role

# Local and traditional breeds:

Very often in the last decades has been common the abandonment of native species more wild, frugal , strong, easy to breed **but** less productive

Now, many of these breeds have become extinct or threatened with extinction.

The “new” breeds are more productive (need more resources) and can play a completely different ecological role at local scale.

*...lazy cows....*

# Livestock in a western country, an example:

## Italian breeds and Parks

Many ( $\pm 100$ ) breeds in many areas (almost in Parks)

Species	#	Parks and activities
Horses and Donkeys	5 (2 critical)	8 few projects
Cows	9 (3 critical)	8 some projects
Sheep	11 (2 critical)	11 some projects
Pigs	2 (1 critical)	2 no activities



# Alpine landscape

(according to Google images search)



# Conserving livestock:

## **Ecological role (ecosystem conservation):**

The husbandry (free range) represents a great value for ecological protection of typical species of grassland environments (human-related secondary successions).

The abandonment of grazing has negative effects on biodiversity for the loss of community.

In particular for native communities and wildlife positive correlations between grazing and presence/consistency of many species of birds and ungulates have been already demonstrated.

# Ecological role

**(steinbocks feed on mountain pasture)**



# Conserving livestock:

## **Landscape conservation role:**

The husbandry has a high value for the protection of landscape where agriculture and farming are the distinguishing features .

Loss or decrease of patterns that penalizes the usability and accessibility of the area.

Loss of buildings and other “light infrastructures” that are part of the (e.g. Alpine) landscapes.

Increasing risk of Fire



# Conserving livestock:

## Cultural heritage conservation role:

Breeds are the result of a long process of domestication and are related to the development of the human population on the territory.

They are therefore fundamental to the history and culture of the people. There is an inseparable relationship between these animal breeds, rural people, traditions, memory.



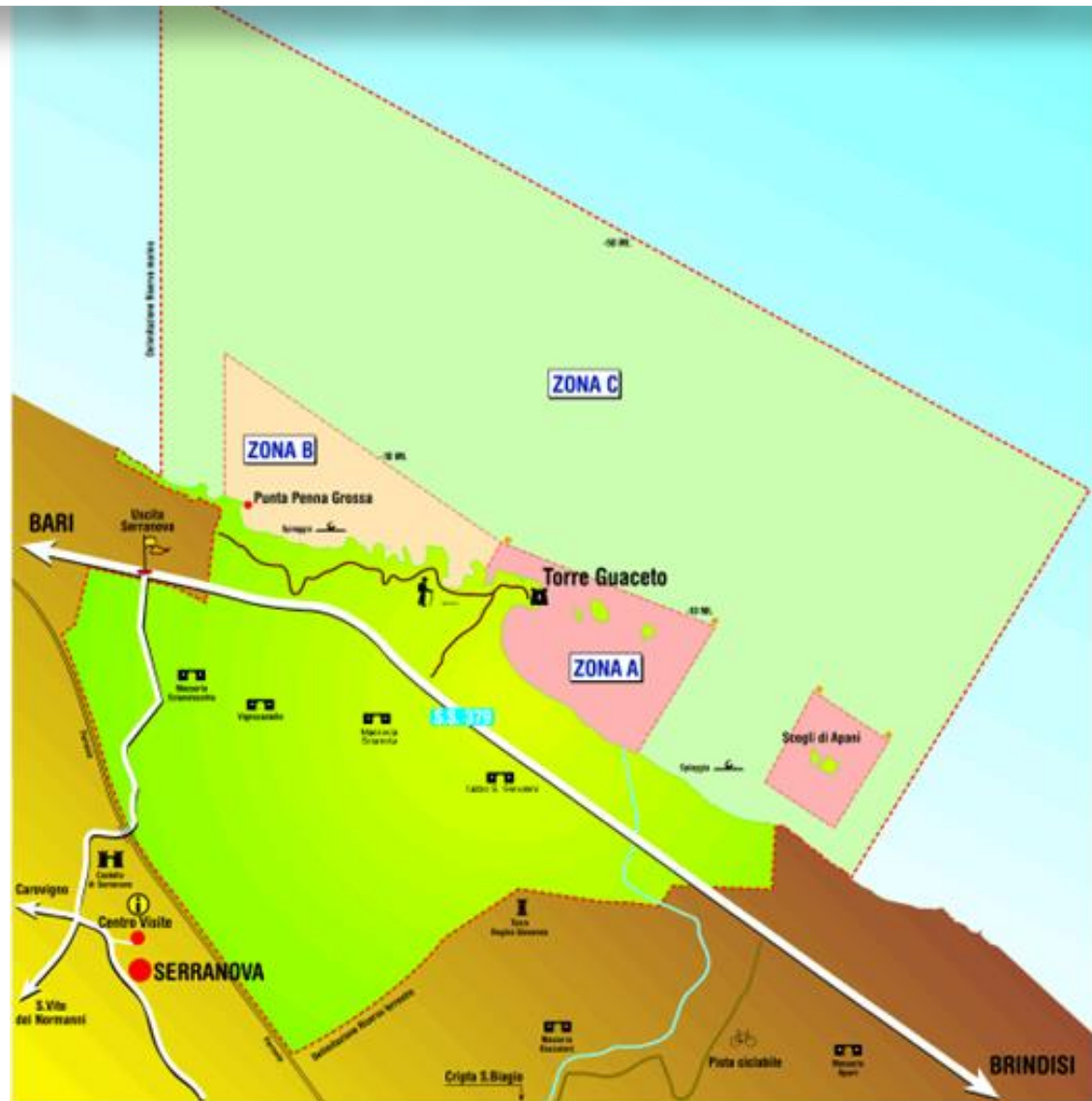


# Governance of fishing activities in MPA Torre Guaceto

**Zone A** (Integral Reserve): Allowed research activities and guided tours

**Zone B** (General reserve): Allowed research activities, guided tours and bathing

**Zone C** (Partial Reserve): Allowed research activities, guided tours, bathing and **artisanal** and recreational **fishing**



In the first five years of management (**2000-2005**) the fishing was forbidden to allow the regeneration of fish stocks

In the **2005** it started the experimental fishing, with the drawing up of a fishing agreement shared among researchers, fishermen and management body

The **agreement** allows the modification of fishing management according with the results of the **monitoring** activities on fishing stocks

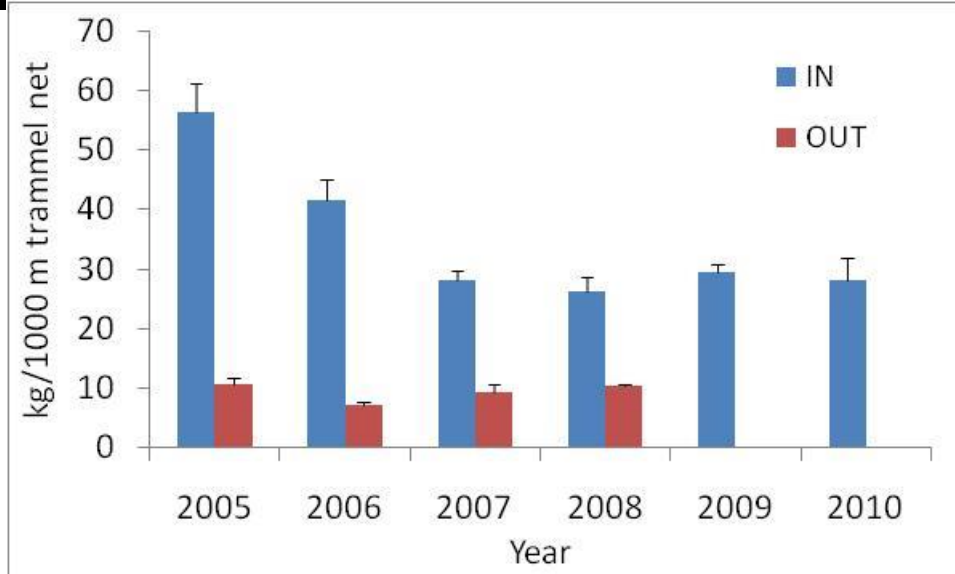




## Total catch per 1000 m of net

Total catch that was far higher within the C zone of the MPA compared to fishing grounds outside the MPA in the beginning, then stabilized around at least the double or more

Average catch in 1988, before the MPA was created: **8,23 kg/1000 m net**



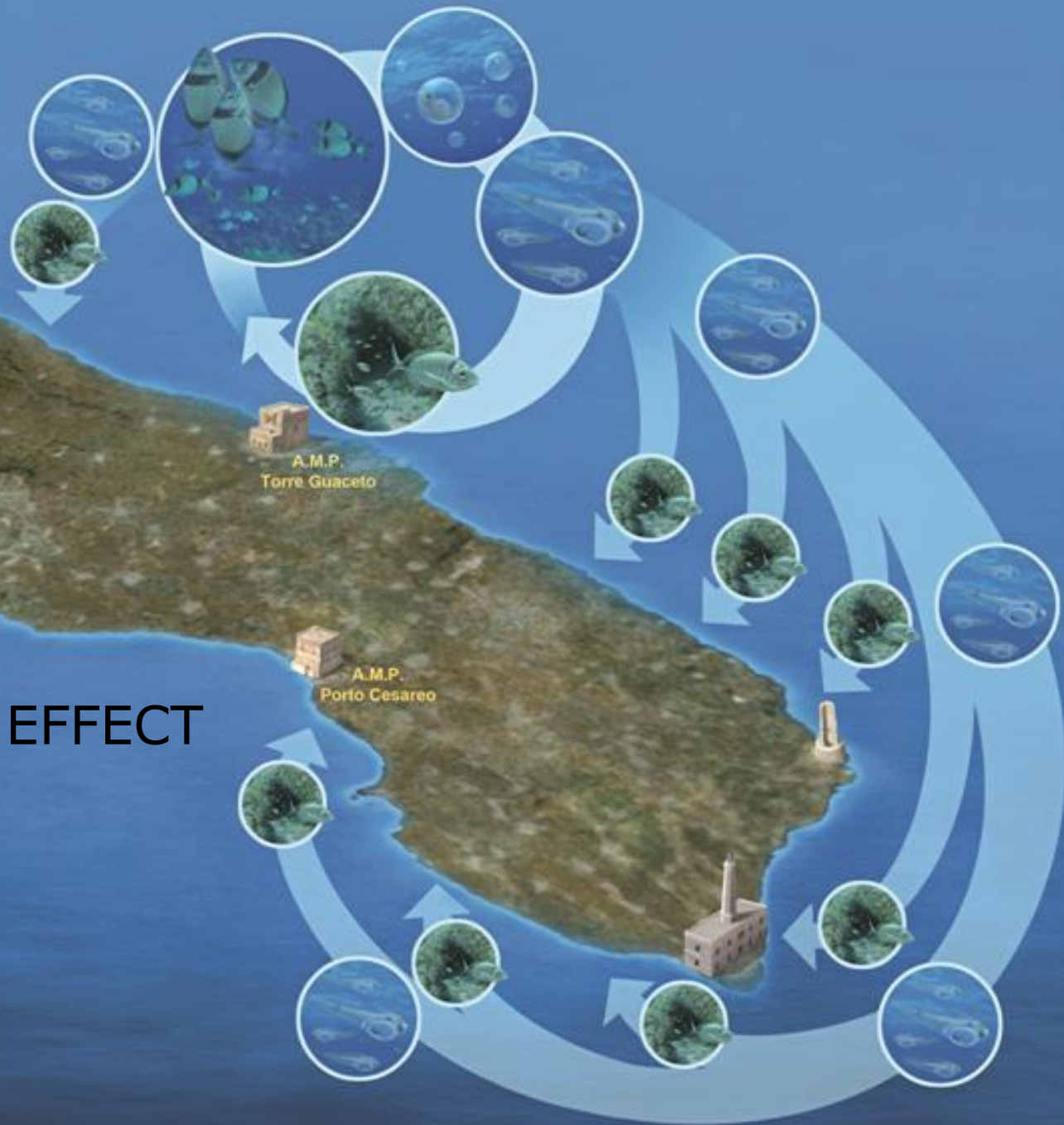
Assessing the potential of an artisanal fishing co-management in the Marine Protected Area of Torre Guaceto (southern Adriatic Sea, SE Italy)

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# SPILL-OVER EFFECT



The Community of Torre Guaceto Fishermen carries on a policy of information and consumers awareness



The policy of control of fishing activities is accompanied by valorization of fish products.

In the MPA of Torre Guaceto the fishermen are environmental educators,



teaching students the concepts of sustainable fisheries and food education



The economic support to the MPA fishermen hails from the promotion of direct sales (*Chefs Alliance and Slowfood Presidium*).



Individuation of new processed products with high added value



Fishermen of Torre Guaceto shifted from the competition (*Tragedy of the commons*) for the resources to the sharing of resources (*Fishing Socialism?*).

The culture of cooperation led to activities of cultural exchange with other communities



# «Slowfeeding» people: a challenge from and for PAs ...Biodiversifood...

## If Biodiversity disappears, what will happen to our food?

Many plants domesticated by man and animal breeds selected for their milk or meat , and wild populations **are disappearing**.

According to the FAO, **75% of edible plant varieties** have been irreversibly lost.

Today 60% of the world's food is **provided by three cereals** (wheat, rice and corn), the human diet is based upon a few selected hybrid varieties.

## What can PAs and Managers do for our food?

# PAAs and food sustainably produced

## PAAs as keepers of enabling conditions

- Managing and maintaining biodiversity
- Promoting local activities (also at wider scale)
- Signing agreements with other bodies
- Working with local and non-local stakeholders
- Financing Pilot projects
- Producing food?
- Selling goods?
- Labelling, Certifying?

# Labelling... this is the problem?

## **Certification Labelling is not among the Park's (or EUROPARC's) duties:**

- Creates conflicts
- Changes the PAs role and responsibilities
- Assigns PAs an unclear vision and visibility
- Influences the stakeholders framework

«commercial» Certification Labels must be defined, assigned (and withdrawn) by an external body

# The EU Food Quality Certification system



- **Protected Designations of Origin:** covers agricultural products and foodstuffs produced, processed and prepared in a given geographical area using recognised methods.
- **Protected Geographical Indications:** covers agricultural products and foodstuffs closely linked to a geographical area. At least one of the stages of production, processing or preparation takes place in the specified area.
- **Traditional Specialities Guaranteed:** highlights the traditional character of foods, either in composition or how it is produced.

**NEVERTHELESS...**

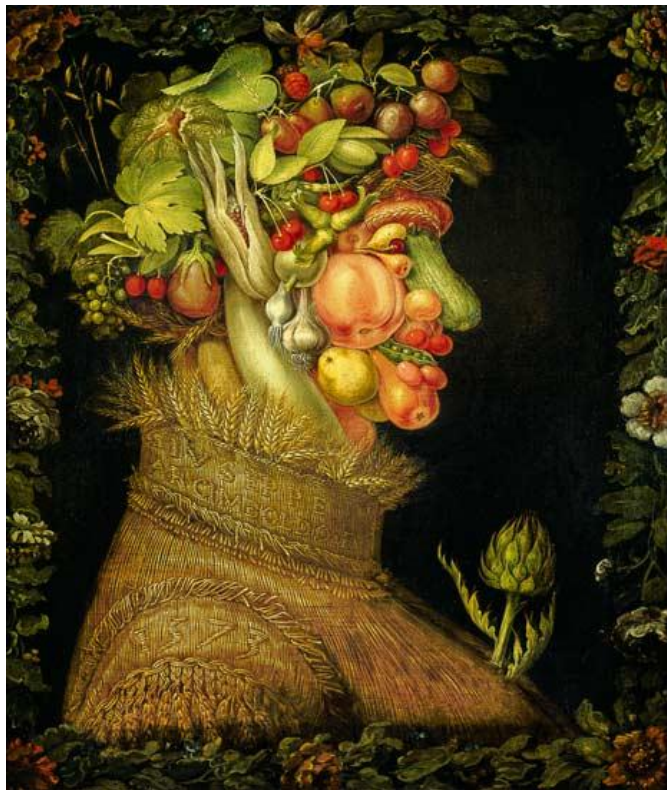
**Quite often those goods are produced in or close to PAs or they need the PAs ES**

# Conclusions

## **The importance of genetic resources in local living databanks (live animals, fish, crops):**

- Maintains local biodiversity, ecosystem processes, cultural values.
- Increases awareness and interest.
- Can have a role in the management activities
- Enhance collaboration among people and managers
- Influences the stakeholders framework

**The preservation of locally exploited resources should be one of the task within a PA Mngmt Plan**



**THANK YOU!**

**Don't eat anything your  
great-grandmother wouldn't  
recognize as food.**

Michael Pollan, In Defense of Food

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