

Food and culture, food and nature: food resources and culinary heritage in Mediterranean wetlands

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Abstract

Since prehistoric times, people have chosen to live near wetlands because the resources of these areas satisfied many of their needs. Wetlands provided an abundance of plants, fish and birds. Archaeological evidence indicates that our remote ancestors hunted, fished and cultivated fields around wetlands since the Early Palaeolithic era. These activities were mostly practised in environmentally sustainable ways, and were largely beneficial for both humans and nature. The peoples of the Mediterranean Basin share a lot of cultural—including culinary—heritage. Food is deeply rooted in the culture of each society, satisfying both the need for nutrition and more general well-being. Since ancient times, food has served as a means of communication with Mother Earth, family members and the broader community. A symbol of prosperity and abundance, it is ever-present at the most important moments in individual lives, symbolically connecting humans and their culture with the world of nature.

Keywords: *Wetlands, wetland resources, food, culture, culinary, gastronomy*

Wetland services

When we think about human habitation near wetlands, one question that comes to mind is why people chose to live near them thousands of years ago? Wetlands have tended to be considered as dangerous and hostile. They are mystical places, where land meets water and the natural approaches the spirit world. People have often told tales about otherworldly creatures appearing at night near lakes, rivers and springs, while numerous other superstitions and myths have always been associated with these places. The threat of malaria has also often been present.

On the other hand, wetlands provided ample supplies of the most important commodity, the one all life forms need to survive: water. Water availability has always been a prerequisite when people select locations suitable for habitation.

They have chosen to live near water and wetlands for a number of other reasons too: wetlands offered protection against fires; because the huts were built on wooden poles a few metres from the shore and connected with the mainland by temporary bridges, they offered protection against animals and other people; moreover, transporting goods and people by water was easier than doing so overland. Rafts, boats and canoes were in use, and wetlands would have been

easier to cross by boat than walking around them. Wetlands have also been considered places where the profane meets the sacred, where people came closer to gods and spirits, which made them suitable for burials and sacrifices (Ramsar Convention Secretariat, 2001a).

The most important factor that attracted people to wetlands, though, was that they were both suppliers of fresh water and could fulfil most human dietary needs. Wetlands, likened to ‘the kidneys of the landscape’ (Macaskill, 2009), were providers of the clean water which was essential for people’s health. In addition, all sorts of plants, fish and game were abundant as wetlands offered fertile, organic-rich, moist soils for vegetation and attracted fauna that came to quench their thirst. During the Neolithic Age, when people ceased being nomads and started to build settlements and to domesticate animals, wetlands became even more appealing, as they could be used for irrigation and for grazing lands which are five times more nutritious per unit area than terrestrial grasslands (ibid.).



Fig. 4.1 Traditional dried bleak in Brajcino village, Prespa Lakes, FYR of Macedonia.

The wetland food chain

Why are wetlands such excellent food providers? The factor that differentiates them from other types of ecosystem is the presence of large quantities of water that create favourable conditions for a large variety of species. Wetland ecosystems embody a ‘wetland food chain’. They provide an abundance of plants which are primary producers and form the basis for the food chain. Plants are eaten by herbivores (mice, rabbits, deer, some insects, fish, ducks and other waterfowl) who constitute the primary consumers. The primary consumers are eaten by secondary consumers (birds of prey, snakes, foxes, fish, wild cats etc), and the secondary consumers are eaten in turn by tertiary consumers-predators including turkey vultures, crabs and people (Kalman, 2007).

Of course, people are also part of the wetland food chain. Wetland products such as fish and shellfish support many local economies. In addition, other animals such as deer and waterfowl, which subsequently constitute a source of food and income for people, make use of wetlands for habitat and food.

Healthy wetlands – healthy food

Healthy wetlands provide healthy food for people and all the creatures that live on and around them. The quality of coastal and inland waters must, for that reason, be safeguarded. Globally, more than a billion people, most of them in developing countries, consume fish on a regular basis because they depend on fish for the majority of their animal protein needs (Ramsar Convention Secretariat, 2008). While a reduced availability of fish may sound alarming enough to westerners, poorer populations are directly threatened by malnutrition caused by a diminished protein intake, which is further compounded by increased susceptibility to disease.

Some 62% of the fish we eat comes from capture fisheries and 38% from aquaculture (ibid.). The principles of sustainability must be applied, as three quarters of the commercially important marine and inland fish-stocks that provide the food on our plates are over-fished. For its part, aquaculture, if not practised soundly, can cause pollution, habitat destruction and the escape of non-native species into the wild.

Traditional food resources

The food resources in Mediterranean wetlands have always been important. Plants, animals, soil and water have been used to fulfil fundamental human needs around the Mediterranean basin for thousands of years. Wetlands have provided fish, game, fodder and other resources. People have used these resources to survive and, later on, to obtain economic benefits by trading these products (Zalidis et al., 1999). They developed several methods, tools and techniques associated with food that allowed them to take full advantage of the wealth these places can offer.



Fig. 4.2 Buffalo grazing by Lake Kerkini, northern Greece.

Game

Archaeological evidence including elephant bones from the Torralba marshes in Spain and long wooden spears unearthed in Schöningen, Germany, confirm that our remote ancestors were already hunting in wetlands in the Early Palaeolithic era (Ramsar Convention Secretariat, 2001b). Neolithic finds around the Mediterranean Basin testify to the hunting of birds: wild ducks, white-tailed eagles (*Haliaeetus albicilla*), peregrine falcons (*Falco peregrinus*), tawny owls (*Strix aluco*), partridges, turtle doves (*Streptopelia turtur*) and pigeons.

Hunting has been an important activity in every major civilisation around the Basin throughout history. The Egyptians had a great respect for the animals they hunted, and would pray to the images of the god and goddess of the animals they hunted to guarantee their safety and the success of the chase. Hunters had a vast knowledge of animal habits, diseases and diets, and were very successful as a result. The ancient Greeks hugely appreciated delicacies such as pheasant, quail, wild guinea fowl and all kinds of small birds, as well as seagulls and pelicans. They even consumed various nocturnal birds, which they cooked with herbs, including some owl species but not the little owl (*Athene noctua*) associated with the goddess Athena –to avoid possible mistakes, hunting at night was therefore forbidden in the Athenian territory (Toussaint-Samat, 1992). In Roman times, hunting was considered a sport. Game birds were eaten only by the privileged, while in the countryside only land owners and freemen were allowed to hunt. Slaves were forbidden from the activity and were sometimes executed for defying this rule. The Gauls enjoyed natural game reserves in their magnificent forests and also hunted in the marshes and in adjoining rivers, where passing migratory birds (geese, ducks and cranes) were abundant (ibid.).

Fish

Fish bones and shells found during archaeological excavations also testify to the importance of fishing to people's diet. In the Cosquer cave in Southern France, cave paintings from over 16 000 years ago have been found, some with drawings of seals that seem to have been harpooned (Clottes et al., 1996). Ancient Egyptians by the River Nile invented several fishing techniques and tools which are illustrated in tombs, drawings and papyrus documents. An ancient Greek wine cup from 500 BC depicts a boy crouching on a rock with a fishing rod in his right hand and a basket in his left. Romans are depicted in mosaics which show them fishing from boats with both rod and line and nets. Thousands of years of fishing practices have resulted in an immense cultural wealth of traditional techniques and equipment used for the exploitation of this resource; having been passed down from generation to generation, this cultural repository merits protection.

Rice

Wetlands have provided fertile arable ground since the Neolithic era, when people first settled and cultivated land. Of the many crops that flourished around them, the

most characteristic was rice, a crop which requires large quantities of water. Rice has been produced in the Mediterranean area since Roman times, but became a staple food mainly after the Arab invasion. The seven thousand varieties of rice can be grouped into three categories: short, medium and long-grain rice. Rice provides 20% of the world's dietary energy needs (WWT, 2008) and forms the staple diet for 3 billion people globally (Ramsar Convention Secretariat, 2001b). Rice is also used to make flours, starches and thickenings, as well as having industrial uses in, inter alia, cosmetics, paper and plastics. It has been considered a gift from heaven, demonstrating that the gods care for mankind. The multitude of its grains symbolises fertility and abundance, so handfuls are thrown at weddings, an ancient custom originating in the East which is now widespread in the western world, as well. Two of the most important rice cultivation areas in the Mediterranean are the Camargue in southern France, and the Albufera de Valencia in eastern Spain (Toussaint-Samat, 1992).

Rice-growing as practised in the past was generally environmentally sustainable, giving mutual benefits to humans and nature. People shaped the environment around wetlands in a way that allowed them to harvest what they needed for their sustenance and small-scale trade.

Traditional wetland products

The cultural heritage of all the great civilisations that flourished in the Mediterranean region—including its culinary heritage—is incredibly rich. People living near wetlands have created and developed a number of characteristic traditional delicacies that are prepared using methods handed down from generation to generation, and which enrich the cultural heritage of each region. Examples include smoked eel and *bottarga* from Orbetello Lagoon in Italy (Lenzi, this volume, p. 172), paella from Albufera de Valencia in Spain, fish-roe from Messolongi Lagoons (Spyratos, this volume, p. 182) and Prespa beans from Greece (Malacou, this volume, p. 329).

Recipes using traditional wetland products

Traditional paella from Valencia¹

When the Moors conquered much of Spain one thousand years ago, rice cultivation was introduced into the Albufera de Valencia. The Moors also introduced the technology that went with it: irrigation channels, sluice gates, dikes and irrigation wheels, all of which are still in use today. Paella was a peasant dish cooked over an open fire in the fields and eaten directly from the pan using wooden spoons. Seafood is not easily found in the Valencia area, so the impression that seafood is used in the traditional paella recipe is incorrect. Instead, chicken, rabbit, duck and snails were used, with snails the most common of all

¹ <http://www.alicante-spain.com/spain-tips/paella.html>, checked 8 April 2011.

proteins. For special occasions rabbit or duck would be added, with wealthier people using chicken.

Ingredients (serves 6)

- 1 medium-sized chicken
- 1 medium-sized rabbit
- 2 medium-sized ripe tomatoes, chopped
- 165 g broad green beans (bachoqueta)
- 130 g large white Lima beans (preferably 'garrofón' –Valencian white beans)
- 1 level teaspoon of saffron
- 3 cups of medium-short-grained rice (preferably Spanish rice, or alternatively Italian Arborio)
- 8 cups of hot water or chicken broth
- olive oil (enough to cover the bottom of the paella pan)
- salt (to taste)
- 1 tsp of sweet red paprika

Heat the oil. Add the rabbit and chicken (lightly salted) when it is quite hot, and cook until golden. Add the white and green beans and, while they are being cooked, scoop a hole in the middle of the paella pan and cook the chopped tomatoes there. Add the paprika, stirring quickly, and immediately add the hot water or broth, which should almost reach the top of the paella pan.

Cook all the ingredients for about 20 minutes over a fire and taste for salt. Add the rice, distributing it evenly and make sure it is covered with liquid. The fire should be fairly high, maintaining the boil. Cook for 20 minutes and do not stir the rice once added to the pan, just change its position frequently to distribute the heat evenly. The broth should be absorbed when cooking is finished. Take the paella off the fire and let it stand for about 10 minutes, covering the top of the pan with a napkin. Decorate the pan border with small wedges of lemon and add branches of romero (aromatic herbs) in the centre.



Fig. 4.3 Paella being cooked over an open fire.

Roast Prespa beans ²

The broader Prespa Lakes area is well-known for the cultivation of many varieties of beans. Climatic conditions and soil composition add a unique taste to the beans, which carry a P.D.O. (Protected Designations of Origins) label. This is a typical traditional recipe which uses Prespa elephant beans.

Ingredients (serves 6)

500 g Prespa elephant beans
2 carrots (cut into rounds)
1 large onion (sliced)
1-2 red peppers (chopped)
2 garlic cloves
2-3 tomatoes or tomato paste
parsley
mint
1 tsp salt
3/4 cup olive oil

Soak the beans overnight. Wash them and boil them for 5 minutes. Drain them and put them in a cooking pot, adding 5-6 cups of boiling water. Add the carrots and cook them on a low heat until tender. In another pot, cook the onion until golden-brown in 3-4 tablespoons of oil, and add the peppers, garlic, tomatoes, parsley, salt and mint. Drain the beans and carrots, put them in a pan and add the tomato sauce and the rest of the oil. Bake for 30-40 minutes at 180-200°C.



Fig. 4.4 Traditional baked Prespa beans.

² <http://www.prespes.gr>, checked 8 April 2011.

Couscous with octopus³

This is a very typical recipe of the Kerkenna Isles in southern Tunisia. The Kerkenna archipelago is a marine-coastal wetland characterised by very shallow waters, typical traditional fishing practices and an abundance of octopus. The most famous local speciality is a couscous with octopus dish unique in all North Africa.

Ingredients (serves 8)

2 kg octopus
2 medium white onions
4 tomatoes
4 green papers
6 cloves of garlic
200 g tomato puree
1 tbsp curry powder
1 tsp salt
1 tbsp chilli powder
500 g carrots (sliced)
1 kg potatoes (in chunks)
500 g green beans
200 g pumpkin (in chunks)
25 ml olive oil
1 kg couscous

Clean the octopus and boil for 10 min. Heat the olive oil in a separate pot and add the octopus, onions, tomatoes, green papers, crushed garlic, tomato puree, salt, chilli powder and the spices and leave to cook over a medium heat for 30 min. Add the carrots, potatoes, green beans and pumpkin.

Wash the couscous and put it in a steaming basket on top of the pot. Leave to cook for 35 min. Mix the sauce with the couscous and serve.

Wetland food products and sustainable local economies

'In the age of tourism, place has become a consumer commodity and food a major part of the anticipations of pleasure that the traveller brings to a new country' (Urry, 2002).

But this has not always been the case; two hundred years ago, regional cuisines did not enjoy much respect; instead, they were considered poor and uninviting

³ Personal communication, Nejib Benessaiah.

(Téchoueyres, 2001). Additionally, as a result of industrialisation, artisan producers were threatened and their traditional techniques were abandoned (Barcelona Field Studies, 2009). In early twentieth century, this trend started to reverse. Rural space became equivalent to health, local place was considered heritage, and local traditions began to be promoted.

Later in the century, cultural tourism started to flourish. Many travellers were progressively interested in delving into a region's culture and learning about the local way of life, history, customs and traditions to satisfy their cultural needs (Ritchards, 1996). Among the things cultural tourists pursue are a well-being lifestyle, authenticity, environmental protection, gastronomy and enjoying a high-quality experience. Foods incorporate characteristic elements of the tradition and culture of a region, and cultural tourists look for a cuisine that places emphasis on the heritage of a place (Barcelona Field Studies, 2009). Consuming local foods is like taking in a soupçon of the identity of a place (Téchoueyres, 2001).

In more recent years, cooking and local cuisines have been broadly advertised in the media. Food programmes, TV channels and magazines promote homemade cooking and good quality food. The 'celebrity chefs' beloved by the public⁴ support the use of local products and praise regional cuisines⁵.

These changes in mentality and people's newly developed social needs can benefit the local economies of the Mediterranean. In a place where so many great civilisations interacted over time, the resulting gastronomy is unique and considered one of the most balanced, nutritious and healthy diets in the world. As part of its cultural heritage, the culinary heritage of each region offers an opportunity for visitors to explore it in pleasant and interactive ways.

There are a great variety of wetland products: seafood, game, dairy products from animals grazing in wet meadows, rice, fresh fruits and vegetables, legumes... the list is nearly endless. Wetland visitors are presented with many opportunities to taste these products and take some of them back home. Traditional drinks and sweets, fish and game products, legumes and cheese are often sold locally near wetlands. Tavernas and traditional restaurants can be also found in considerable numbers around wetlands, where visitors can savour the tastes of the region.

These economic activities, which usually have a low environmental impact, can support local economies in an efficient way, especially if they are successfully integrated into local ecotourism initiatives. It is generally agreed that cultural tourists spend much more on average than standard tourists (Gunlu et al., 2008). High-quality wetland products, if promoted wisely, can find their place in international markets and stand out from other mass-produced commodities (as in the case of *Fleur du Sel de Camargue*).

4 For example, each time a popular TV food show was broadcast, an extra 1.3 million eggs were sold in Britain.

5 Barcelona Field Studies Centre, 2009.

The importance of food in culture

All animals eat, but only humans cook (Fox, 2009). Food, therefore, is part of what differentiates people from animals, and it satisfies more than people's need to survive. It is deeply embedded in the culture of each society, and interrelated with its history, geography, language, religions and art.

The study of history reveals dietary habits of the past, and teaches us about rural revolutions and the way people fought to obtain food (the Neolithic Revolution, the Muslim Agricultural Revolution and the British Agricultural Revolution). It is also a valuable source of information about past climatic conditions and how they have affected food supply.

Studying geography allows us to compare the dietary habits of different regions, dissimilarities between people of the South and those of the North, and the financial dependence of different societies on patterns of cultivation. Food also represents the identity of a people, a nation or a region. A typical example is the Mediterranean region and its diet, which encompasses more specifically characteristic cuisines (such as Italian, French and Lebanese).

Language discloses a large variety of connotations of food in all kinds of texts, in literary prose and in poetry.

Food is also linked to all world religions and spiritual traditions. There are foods which the faithful are not permitted to eat, periods of fasting (Ramadan, Lent), and food that is traditionally consumed during religious ceremonies.

Finally, food preparation has always been considered an art. Cooking, as mentioned above, became a mark of our humanity and our differentiation from other animals. Its ability to satisfy a very basic need, that of nutrition, combined with the ability to please, to entertain and to uplift body and the soul, has made food and its sharing a central feature of people's lives.

Conclusions: food, society and culture

It has been said that throughout the course of human civilisation, food has been considered sacred because it feeds and sustains human beings and is produced by human labour, which is considered sacred in itself (Skouteri et al., 2005).

Satisfying more than hunger, food is central to a profound social urge. Food is usually shared: families eat together, larger groups of people celebrate by feasting together, sharing, distributing, giving, making food a focus of symbolic activity and altruism; a stranger is offered a plate of food; milk –the product of her own body– is the most important thing a mother can give her child, making food a symbol of love and security (Fox, 2008).



Fig. 4.5 Sharing dinner in a traditional guest house, Prespa Lakes, September 2009.

It is this symbolic quality of food that has served since ancient times as a means of communication between family members, members of a community and –at an even broader level– with Mother Earth (Machairopoulou, 2003). Feasts have always had one common element: the consumption of food. Food has also served as an excuse for a celebration to begin. It has constituted a symbol of prosperity and abundance, and has been present at the most important moments in the cycle of life, at baptisms, weddings and funerals. In this manner, the products of the Earth and of the creatures the Earth sustains symbolically connect humans and their culture with the world of nature.

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