Carp
Cyprinus carpio

Biology

The common carp (Cyprinus carpio) is native to Asia and Eastern Europe. Although there is evidence of Romans consuming and keeping carp, it was not until the Middle Ages that carp began to be raised in bodies of water in Europe. They were often associated with monasteries, as fish rather than meat was consumed on fast days.

Carp is a domesticated species that has adapted to husbandry systems. Tolerant of water quality and temperature, its ecological spectrum is broad. It lives in all types of slow flowing or still waters. Carp are omnivorous, mainly consuming zooplankton and zoobenthos, detritus and parts of aquatic plants. The original form of carp is called ‘scaly carp’, with its big and regularly spaced scales. The domesticated strains include fish with few and irregularly distributed scales (‘mirror carp’).

Farming

Carp are most often reproduced in hatcheries. As soon as they hatch, the larvae are transferred to small shallow tanks or nursing ponds, which are filled with plankton-rich water. At first, the pond’s natural production of plankton, vegetation and benthic invertebrates is enough to feed the young carp. Later, however, the fish often receive supplementary feed, such as cereal coarse meal or various feed mixtures. In autumn, either the pond is cleaned and the carp are transferred to a deeper wintering pond or they stay in the original pond until spring. During the coldest months they enter a period of reduced activity when they feed little or not at all.

The following spring, the carp are transferred to summering ponds, which are used to raise two year old fish. In the spring of their third year, the carp are moved to large fattening (marketing) ponds. They feed on the food provided by the ecosystem, although their diet is usually supplemented with cereals.

The fish are usually collected in autumn (before the water freezes). Depending on their size, they are either selected as broodstock or they are marketed. As most carp are sold just before Christmas, they are usually left for several weeks in clean fresh water, which also helps to improve the taste before they are marketed. However, more and more carp are being harvested at other times of the year, either for direct consumption or for restocking waters for angling purposes.

A fully mature carp can weigh up to 30 kg and measure a metre or more. Marketing size, however, is usually 30 to 50 cm in length weighing more or less 1.5 kg-3 kg (depending on the region) – which usually takes three to four years to produce in European weather conditions.

Normally, carp farming is semi-intensive. Carp can be farmed in monoculture, polyculture (together with other freshwater species, such as pike, catfish or silver carp) or in an integrated culture with other agricultural activities. Carp ponds often play an important role in enhancing biodiversity, retaining water in the landscape and flood protection.

Production and trade

The vast majority of carp production comes from aquaculture. World carp production is dominated by China, which accounts for 80% of the total output. Far behind China, the major producers are Indonesia, Vietnam, the EU, Russia, Bangladesh and Brazil. Within the EU, the two biggest producers are Poland and the Czech Republic. There is almost no trade in carp with third countries. As regards intra-EU trade, there are only limited flows from the Czech Republic to Germany. The species remains unknown in several Member States.
Presentation on the market

Nowadays carp is mainly produced in central Europe, where it is served at traditional Christmas and Easter holiday meals. In the traditional Jewish speciality, ‘gefilte fish’, carp flesh is minced with onion and then poached and stuffed under the fish skin.

In the eastern EU Member States people are accustomed to buying carp live. Producers are trying to diversify their offer by setting up small processing units to supply semi-prepared products (cutlets, fresh or smoked, filleted or sliced) and prepared products based on traditional recipes. A large part of the production goes to anglers for restocking purposes and supplying recreational fishing ponds.

Nutritional value per 100 g

(average)

Calories: 100 kcal
Protein: 17.7 g
Selenium: 20 µg
Vitamin D: 3.8 µg
EPA: 66 mg
DHA: 60 mg

Carp fillets in beer

Ingredients for 4 people

- 500 g carp fillets
- 30 g butter
- 150 g onions
- 30 g pain d’épices – a type of gingerbread (or brioche/white bread and 1 soup spoon of honey)
- 50 g celery
- Thyme, bay leaves, parsley
- 33 cl mild white beer
- 10 cl cream
- Salt and pepper

Instructions

1. Chop the onions and celery finely.
2. Soften the onions and celery in the butter, then add the pain d’épices (or the diced brioche/white bread and honey).
3. Place the seasoned carp fillets on the vegetables and pour the beer over them. Add the thyme and bay leaves.
4. Increase the heat to a simmer, then remove the fillets and keep them warm.
5. Blend the cooking juices using a mixer and then strain to remove the bread crumbs.
6. Return to the heat and reduce until the sauce thickens.
7. Add the cream and check the seasoning.
8. To serve, pour the sauce over the fillets and garnish with chopped parsley.

Recipe provided by Chef Philippe Votquenne (Euro-Toques Belgium)

EU carp supply and trade* (2009)

(million EUR)

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* from fishery and aquaculture.
Source: Eurostat.

EU carp aquaculture production (2009)

- over 15 000 tonnes
- from 5 000 to 10 000 tonnes
- from 2 000 to 5 000 tonnes
- less than 1 000 tonnes

Source: Eurostat.