Edible crab (*Cancer pagurus*)

MarLIN – Marine Life Information Network
Biology and Sensitivity Key Information Review

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A report from:
The Marine Life Information Network, Marine Biological Association of the United Kingdom.

Please note. This MarESA report is a dated version of the online review. Please refer to the website for the most up-to-date version [https://www.marlin.ac.uk/species/detail/1179]. All terms and the MarESA methodology are outlined on the website (https://www.marlin.ac.uk)

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***Cancer pagurus*, edible crab.**
Photographer: Sue Daly

See online review for distribution map

Distribution data supplied by the Ocean Biogeographic Information System (OBIS). To interrogate UK data visit the NBN Atlas.

Researched by	Ken Neal & Emily Wilson	**Refereed by**	This information is not refereed.
Authority	Linnaeus, 1758		
Other common names	-	**Synonyms**	-

Summary

Description

Crab with a heavy, oval shaped body, easily distinguished from other species by its 'piecrust' edge and massive black tipped pincers. It is reddish-brown in colour with very large individuals having a carapace width of up to 25 cm although individuals are typically up to 15 cm.

Recorded distribution in Britain and Ireland

All British and Irish coasts.

Global distribution

From Norway throughout the North Sea and English Channel to the coast of Portugal. *Cancer pagurus* may penetrate into the Mediterranean Sea and occur in the Black Sea (Anosov, 2000) but this is yet to be confirmed.

Habitat

Found on bedrock including under boulders, mixed coarse grounds, and offshore in muddy sand. Lower shore, shallow sublittoral and offshore to about 100 m.

Depth range

From intertidal down to 100 m

Identifying features

- Claw pincers black, slightly unequal in shape and toothed.
- Wide, oblong-shaped carapace is distinctively marked along its fronto-lateral margins with 10 rounded lobes.
- Tufts of stiff hairs in rows on legs (pereopods).
- Last leg segment (dactyls) of walking legs ending in spine-like tips.

Additional information

Also known as the brown crab.

Listed by

Further information sources

Search on:

G G G NBN WoRMS

Biology review

Taxonomy

Family	Cancridae
Genus	Cancer
Authority	Linnaeus, 1758
Recent Synonyms	-

Biology

Typical abundance	High density
Male size range	5-27cm
Male size at maturity	11cm
Female size range	11.5cm
Female size at maturity	
Growth form	Articulate
Growth rate	0.1-1cm/year
Body flexibility	None (less than 10 degrees)
Mobility	
Characteristic feeding method	Predator
Diet/food source	Planktotroph
Typically feeds on	A variety of live molluscs and crustaceans as well as carrion
Sociability	
Environmental position	Epibenthic
Dependency	No information found.
Supports	No information
Is the species harmful?	No

Biology information

Feeding

Cancer pagurus is a large crab typical of hard and soft bottom communities. It is an active predator and consumes a variety of crustaceans (e.g. the green shore crab *Carcinus maenas*, the broad clawed porcelain crab *Porcellana platycheles*, the long clawed porcelain crab *Pisidia longicornis*, the hairy crab *Pilumnus hirtellus* and the squat lobster *Galathea squamifera*) and will also eat smaller members of their own species (conspecifics) (Lawton, 1989). *Cancer pagurus* also consumes a variety of molluscs e.g. the dog whelk *Nucella lapillus*, the winkle *Littorina littorea* (Lawton & Hughes, 1985), razor shells *Ensis* spp. (Hall *et al*., 1991), the blue mussel *Mytilus edulis*, the common cockle *Cerastoderma edule* and the oyster *Ostrea edulis* (Mascaro & Seed, 2001). Motile prey may be stalked and pounced upon, trapped under the abdomen and crushed with the chelae. Some prey is also ambushed from shelters under rocks (Lawton, 1989). In sediments *Cancer pagurus* may dig large pits to access bivalve molluscs such as *Ensis* sp. (Hall *et al*., 1991) and *Lutraria lutraria*. *Cancer pagurus* is mainly nocturnal, presumably to reduce predation by wolf fish, seals and cod (Skajaa *et al*., 1998).

Growth

Juveniles settle in the intertidal zone in late summer/ early autumn (Bennett, 1995) and remain there until they reach a carapace width (CW) of 6-7 cm (which takes about 3 years) before they move to subtidal areas (Regnault, 1994). Growth rate varies with age and gender. Between years 4-8 of a male crabs life, it grows at about 1 cm CW per year. After the 8th year, growth rate slows gradually to about 2 mm per year between its 16th and 20th years. Female growth rate is less, at about 0.5 cm per year between years 4 and 8, declining to 0.1 cm per year between years 16 and 20 (Bennett, 1979).

Size can be related to depth. In less than 25 m of water, males and females have a mean CW of 14 cm. Between 25 and 55 m, males are on average 17 cm CW and females 15.8 cm, over 55 m these sizes increase to 18 cm CW for males and 17 cm CW for females (Brown & Bennett, 1980).

Habitat preferences

Physiographic preferences	Offshore seabed, Strait / sound
Biological zone preferences	Lower circalittoral, Lower eulittoral, Lower infralittoral, Mid eulittoral, Sublittoral fringe, Upper circalittoral, Upper infralittoral
Substratum / habitat preferences	Bedrock, Coarse clean sand, Cobbles, Fine clean sand, Gravel / shingle, Muddy gravel, Muddy sand, Pebbles, Sandy mud
Tidal strength preferences	Moderately Strong 1 to 3 knots (0.5-1.5 m/sec.), Weak < 1 knot (<0.5 m/sec.)
Wave exposure preferences	Exposed, Moderately exposed
Salinity preferences	Full (30-40 psu), Variable (18-40 psu)
Depth range	From intertidal down to 100 m
Other preferences	None
Migration Pattern	Non-migratory / resident

Habitat Information

Adult *Cancer pagurus* cannot tolerate salinities of 17 psu or lower whereas young (5-10 cm CW) can tolerate reduced salinities for extended periods (Wanson *et al*., 1983).

Life history

Adult characteristics

Reproductive type	Gonochoristic (dioecious)
Reproductive frequency	Annual episodic
Fecundity (number of eggs)	>1,000,000
Generation time	10-20 years
Age at maturity	10 years +
Season	November - February
Life span	20-100 years

Larval characteristics

Larval/propagule type	-
Larval/juvenile development	Planktotrophic
Duration of larval stage	1-6 months
Larval dispersal potential	Greater than 10 km
Larval settlement period	Insufficient information

Life history information

Mating is by copulation in spring and summer and occurs shortly after the female has moulted (Brown & Bennett, 1980). Females are 'berried' (carrying eggs under the abdomen) for 6-9 months after copulation and release the larvae in late spring/early summer (Thompson *et al*., 1995). Berried females do not feed, remaining in pits dug in the sediment or under rocks and are unlikely to be caught in a baited pot. As a result, fishing pressure does not affect larval supply (Howard, 1982). Fecundity is between 0.25 and 3 million eggs per female depending on size (Bennett, 1995). Females can store sperm and berried females retained after an experiment went on to produce viable larvae in the following reproductive season without moulting or copulating (Naylor *et al*., 1999). In the North Sea, berried females migrate offshore to release larvae and then move back inshore to feed (see larval general biology; Nichols *et al*., 1982).

Sensitivity review

This MarLIN sensitivity assessment has been superseded by the MarESA approach to sensitivity assessment. MarLIN assessments used an approach that has now been modified to reflect the most recent conservation imperatives and terminology and are due to be updated by 2016/17.

Physical Pressures

	Intolerance	Recoverability	Sensitivity	Confidence
Substratum Loss	Intermediate	Moderate	Moderate	Very low

Substrate removal is likely to remove a proportion of *Cancer pagurus* although some will escape. Those that escape undamaged will quickly recolonize whatever seabed remains and migrate to new habitats if necessary. Therefore an intolerance of intermediate and a recoverability of moderate have been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Smothering	Low	Very high	Very Low	High

Shoreline dumping of coal waste and fly ash in the western North Sea filled in rocky crevices, precluding their use by *Cancer pagurus*. Crab fisheries have declined in the areas of dumping possibly due to *Cancer pagurus* avoiding the suspended matter or because the paucity of benthic fauna (i.e. prey) caused by heavy siltation. China clay waste from the Rivers Fal, White and Par in Cornwall had a similar effect (Shelton, 1973). However, crabs are able to escape from under silt and migrate away from an area. Smothering is unlikely to cause mortality therefore an intolerance of low has been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Increase in suspended sediment	Low	High	Low	Very low

Shelton (1973) reported that *Cancer pagurus* avoided areas of spoil dumping and suggested this may be due suspended sediment or due to decreased macrofauna. *Cancer pagurus* relies on visual acuity to find prey so although mortality due to an increase in suspended sediment is unlikely, some perturbation is expected and low has been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Decrease in suspended sediment	Tolerant	Not relevant	Not sensitive	

Cancer pagurus is not reliant on suspended sediment, therefore is unlikely to be affected by a decrease in suspended sediment and tolerant has been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Dessication	Tolerant	Not relevant	Not sensitive	Low

Adult *Cancer pagurus* are very unlikely to be subject to desiccation because they are subtidal but are likely to survive at the benchmark level as they can survive up to 24 hours in moist air (Regnault, 1992). The juveniles in the intertidal seek shelter in moist microhabitats under rocks and seaweed (Lawton, 1989) and are likely to survive extended exposure in the short term and will migrate downshore upon emersion on the next high tide. *Cancer pagurus* survive for long periods in fish boxes waiting to be sold, therefore tolerant has been recorded.

	Intolerance	Recoverability	Sensitivity	Confidence
Increase in emergence regime	Tolerant	Not relevant	Not sensitive	High

In an experiment on blood chemistry of emersed crabs, 60 *Cancer pagurus* survived exposure to air but under wet seaweed for 24 hours (Regnault, 1992). However, increased emergence will probably cause them to migrate down shore during a following period of immersion. An increase in emergence is unlikely to cause mortality or perturbation to *Cancer pagurus* and tolerant has been recorded.

Decrease in emergence regime Tolerant* Not relevant Not sensitive* Low

Adult *Cancer pagurus* are subtidal and are unlikely to be affected by a decrease in emergence. Juveniles less than 3 years of age are mainly intertidal (Regnault, 1994) and a decrease in emergence is likely to be beneficial as it would increase foraging time. Therefore tolerant* has been recorded.

Increase in water flow rate Tolerant Not relevant Not sensitive Moderate

Cancer pagurus is highly chemosensitive and can quickly navigate to bait in a current of 0.1m/s. However, when the current speed rises to 0.3 m/s, only 15% of crabs on sediment could make headway, the others were swept away (Nickell & Moore, 1992). Therefore, crabs in strong current are unlikely to be killed but would probably be able to feed only by digging pits for buried bivalves (Hall *et al*. 1991) or ambush from the shelter of topographic features (Lawton, 1989), which may affect their rate of growth and maturity. Nevertheless, high current velocity bedrock habitats are likely to have a plentiful supply of food and provide refuge from the current due to habitat complexity and *Cancer pagurus* may benefit. The greater densities of edible crabs seen by Keith Hiscock (pers. comm.) were seen at the Smalls Rocks, Pembrokeshire and at Strangford Lough Narrows, both areas of very strong currents. Therefore tolerant has been recorded.

Decrease in water flow rate Tolerant Not relevant Not sensitive Low

A decrease in water movement probably would not affect *Cancer pagurus* as it does not rely on water movement for feeding or gas exchange and tolerant has been recorded.

Increase in temperature Intermediate Very high Low Low

Any effect from an increase in temperature would depend on the time of year. Adult *Cancer pagurus* are not tolerant of temperatures over 20°C (Karlsson & Christiansen, 1996) and if an acute change of temperature occurred in summer when sea temperatures are already high, some mortality could occur. However, if an acute rise in temperature occurred in winter the only effect would be an increase in activity associated with a rise in metabolic rate. A chronic increase in temperature is unlikely to affect *Cancer pagurus*. An intolerance of intermediate has been recorded to account for the worst case scenario.

Decrease in temperature Tolerant Not relevant Not sensitive Low

Cancer pagurus will not feed between 0 and 5°C (Karlsson & Christiansen, 1996) and embryos will not develop below 8°C (Thompson *et al*., 1995). Therefore if an acute decrease in temperature took the absolute temperature below 5°C, productivity of *Cancer pagurus* might be affected although mortality is unlikely. A chronic decrease in temperature is unlikely to affect *Cancer pagurus* at the benchmark level and tolerant has been recorded.

Increase in turbidity Tolerant* Not relevant Not sensitive* Very low

The prey of *Cancer pagurus* includes various filter feeding bivalves (Hall *et al*., 1991; Mascaro & Seed, 2001) and filter feeding crabs (Lawton, 1989). The productivity of these prey items is likely to be increased by increased turbidity and thus improve the ratio of effort/predation success by *Cancer pagurus* and thus improve their productivity as well. An increase in suspended matter may reduce predation from visual predators such as seals and fish but is unlikely to affect the foraging of the crab as this is mainly chemosensory and tolerant* has been recorded.

Decrease in turbidity Tolerant Not relevant Not sensitive

Adult *Cancer pagurus* are not dependent in any way on water-borne particles and are unlikely to be affected by a decrease in turbidity.

Increase in wave exposure Low | Very high | Very Low | Low

No information was found on effect of wave exposure. However, edible crabs are found from very exposed to extremely wave sheltered sites. Wave exposure is likely to reduce activity at times and prevent crabs escaping to shallow depths. Therefore an intolerance of low has been recorded.

Decrease in wave exposure Tolerant | Not relevant | Not sensitive | Low

Cancer pagurus occurs in extremely wave sheltered loughs. Decreased wave exposure likelihood of displacement (a favourable effect) and increase food supply but may increase siltation. Overall, *Cancer pagurus* is probably tolerant to a decrease in wave exposure.

Noise Not relevant

No information found

Visual Presence Low | Very high | Very Low | Low

Cancer pagurus is nocturnal and has reasonably good eyesight, any lights that are present in the water are likely to affect their activity patterns. Since they are predated upon by seals (Skajaa *et al*., 1998), large objects in the water such as divers may cause active crabs to seek refuge and inactive ones to remain so. An intolerance of low has been recorded because visual presence is unlikely to cause mortality but will probably alter its behaviour.

Abrasion & physical disturbance Intermediate | High | Low | High

Berried *Cancer pagurus* are likely to be disturbed by dredging and trawls as they are relatively immotile and spend most of their time half buried in the sediment (Bennett, 1995). Abrasion is also likely to make *Cancer pagurus* vulnerable to Burn Spot Disease which may cause some mortality (Austin & Alderman, 1987; Vogan *et al*., 1999). *Cancer pagurus* is found in large numbers in scallop (*Pecten maximus*) beds (pers. obs.) which are commercially exploited by dredging. *Cancer pagurus* is often damaged or killed if struck by a dredge and annual mortality can be as much as 14% of the population (Bradshaw *et al*., 1999). Jenkins *et al.* (2001) found that 63% of *Cancer pagurus* struck by a scallop dredge sustained damage and 68% of those (43% of the total number struck) were killed. Mortality from otter trawls caused a 50% decline in *Cancer pagurus* numbers between 1947 and 1960 (Lindeboom, 1999). *Cancer pagurus* is a rather brittle animal, easily damaged or killed by heavy impacts, and an intolerance of intermediate has been recorded because, although a high proportion of individuals die as a result of scallop dredging, the whole population is unlikely to be affected.

Displacement Tolerant | Not relevant | Not sensitive | Moderate

*Cancer pagurus*is tolerant of being hauled into boats in crab pots and returned to the sea, with an increase in metabolic rate the only effect (Aldrich & Regnault, 1990). It also survives well when caught in pots and taken to laboratories and so is tolerant of being displaced within the marine environment (Regnault, 1992; Overnell, 1984).

Chemical Pressures

	Intolerance	Recoverability	Sensitivity	Confidence
Synthetic compound contamination	High	High	Moderate	High

Toxicity experiments with the oil dispersant BP1002 showed that a concentration of 10 ppm was required to cause 100% in 24 hours (Smith, 1968).

Heavy metal contamination Low High Low High

Cancer pagurus naturally accumulates metal, and levels of metals in the hepatopancreas have been recorded as high as 200 ppm copper, 29 ppm cadmium and 20 ppm zinc in crabs that were considered uncontaminated by anthropogenic input (Overnell, 1982, 1984). A solution of 1 ppm $HgCl_2$ is lethal to *Cancer pagurus* (Bianchini & Gilles, 1996) but *Cancer pagurus* generally seems to be tolerant of metal pollution. Copper and zinc affected arterial blood oxygen levels and caused an increase in heart rate when accompanied by mild hypoxia (Spicer & Weber, 1992). Solutions containing cadmium significantly inhibited gill adenosine phospatase (ATPase) activity at 10 and 100 ppm in short pulses (Law, 1982). Protracted exposure to low concentrations of cadmium lead to a 22% drop in gill ATPase activity which will affect the crabs ability to control the ionic balance of the body tissues (as this is one of the main requirements of adenosine triphosphate (ATP) in the gill) (Law, 1982). Apart from mercury, most metals seem to be non-toxic to *Cancer pagurus* as they are sequestered by metallothioneins and stored in the hepatopancreas for excretion later (Knowles *et al*., 1998; Overnell, 1982; 1984; 1986; Smith *et al*., 1998). Due to the detoxification of metals with metallothioneins, *Cancer pagurus* is unlikely to suffer mortality unless inputs are very high and an intolerance of low has been recorded.

Hydrocarbon contamination Intermediate High Low High

Adult *Cancer pagurus* are unlikely to be directly oiled because they are subtidal. Many intertidal juveniles were found dead after the *Torrey Canyon* oil spill and some dead adults were found subtidally, although healthy individuals were found as well (Smith, 1968). The adults affected subtidally may have been killed by dispersants and not oil. After the *Sea Empress* oil spill, *Cancer pagurus* were found to have total hydrocarbon content of 10 mg/kg wet weight in claw meat and 20 mg/kg wet weight in the hepatopancreas (Law *et al*., 1997). Paradoxically, this increased the *Cancer pagurus* population in the region of the *Sea Empress* spill since the 0.1 - 2.4 mg/kg wet weight concentrations of polycyclic aromatic hydrocarbons (PAHs) tainted the flesh of the crab and led to the closure of the fishery for at least a year eliminating fishing mortality (SEEEC, 1998; Law *et al*., 1998). *Cancer pagurus* in the vicinity of the *Braer* oil spill contained more than 12 times the PAH concentration of unaffected crabs (Topping *et al*., 1997). As with the *Sea Empress*, no mortality resulted from PAH contamination but the crab fishery was closed for a short time to allow PAH elimination (Topping *et al*., 1997). An intolerance of intermediate has been recorded to account for the worst case of juveniles being killed by oiling and possibly affecting the future of the population.

Radionuclide contamination Not relevant High

Cancer pagurus accumulates technetium, a radionuclide of anthropogenic origin, in the hepatopancreas bound by metallothionein (Knowles *et al*., 1998). Accumulated metal can be excreted once exposure has ceased and experimental *Cancer pagurus* cleared half of the accumulated technetium in about 100 days (Smith *et al*., 1998). Due to the detoxification of metal by binding it to metallothioneins, *Cancer pagurus* may be tolerant but the effect of radiation during decay of radionuclides is unknown. Therefore no assessment of intolerance has been made.

Changes in nutrient levels Tolerant Not relevant Not sensitive Very low

Anthropogenic sources of nutrients may cause blooms of phytoplankton which collapse and precipitate onto the benthos and can cause localised bottom water hypoxia. In a benthic survey after such a bloom collapse, a few dead *Cancer pagurus* were found but most were healthy, probably because it is tolerant of hypoxia (see oxygenation). However, benthic bivalves such as *Ensis* were found dead and moribund (Boalch, 1978). Immediately after the precipitation of the bloom, foraging by *Cancer pagurus* was probably improved as it preys upon *Ensis* (Hall *et al*., 1991). However, if the bivalve populations were slow to recover, population dynamics on *Cancer pagurus* may be affected. On the rocky shore, nutrient input has been shown to increase productivity of grazers due to increased algal growth (Rogers, 2003). Since juvenile *Cancer pagurus* consume intertidal gastropods (Lawton & Hughes, 1985), an increase in prey biomass is likely to benefit growth of *Cancer pagurus*. Tolerant has been recorded because *Cancer pagurus* is unlikely to be directly affected by nutrient input and there could be positive and negative effects on the prey of *Cancer pagurus*.

Increase in salinity		Very high		Low

Cancer pagurus is an osmoconformer (Wanson *et al*., 1983) and is probably tolerant to slight increases in salinity but may be affected by acute increases. However, no information has been found on the effect of hypersaline conditions on *Cancer pagurus* and therefore no assessment has been made.

Decrease in salinity	Low	High	Low	High

Adult *Cancer pagurus* are osmoconformers, meaning that they maintain the ionic balance of the haemolymph at a similar concentration to the surrounding water but they are intolerant of salinities below 17 psu. Juveniles (5-10 cm CW) are mainly intertidal and are tolerant of low salinities (Wanson *et al*., 1983). *Cancer pagurus* loses osmoregulatory ability when it moves from the intertidal to the subtidal at about 3 years of age (Regnault, 1992). Intertidal populations of *Cancer pagurus* are probably tolerant of decreases in salinity. However, subtidal adults are likely to be adversely affected by low salinities e.g. from hyposaline effluents. *Cancer pagurus* is a very mobile species and would probably avoid hyposaline water and therefore an intolerance of low has been recorded.

Changes in oxygenation	Tolerant	Very high	Not sensitive	High

Cancer pagurus responds to hypoxia by increasing the efficiency of oxygen extraction from the water by its gills (Aldrich & Regnault, 1992; Spicer & Weber, 1992). *Cancer pagurus* can survive for at least 18 hours in oxygen-depleted conditions (Spicer & Weber, 1992) and can probably survive longer.

Biological Pressures

	Intolerance	Recoverability	Sensitivity	Confidence
Introduction of microbial pathogens/parasites	Intermediate	Moderate	Moderate	High

Cancer pagurus can contract Burn Spot Disease and Pink Crab Disease. The former is caused by bacterial (especially species of *Vibrio*) or fungal infections of epicuticular penetrations caused by abrasions or intraspecific aggression (Austin & Alderman, 1987; Vogan et al., 1999). Burn Spot Disease causes blackened lesions of the shell and melanisation of the flesh, which decreases the market value of the crab (Vogan *et al*., 1999). Mortality occurs in extreme infections when bacteria penetrate the shell and enter the body fluids or when lesions cause the old shell to stick to the crab during moulting (Austin & Alderman, 1987; Vogan et al., 1999). Prevalence of the disease can be high, e.g. 55% of crabs in Langland Bay, Gower had lesions and infection levels can be higher in heavily polluted waters. *Cancer pagurus* can rid itself of shell disease by moulting (Vogan *et al*., 1999). Pink Crab Disease is so named because affected crabs become hyperpigmented and it is caused by an infection of a *Hematodinium*-like dinoflagellate. It is a rare disease but infected individuals become moribund and mortality is high (Stentiford *et al*., 2002). An intolerance of intermediate has been recorded.

Introduction of non-native species	Not relevant	Not relevant	Not relevant	Not relevant

Cancer pagurus is not known to compete with or be affected by any non-native species.

Extraction of this species	Intermediate	High	Low	High

All around Britain and Ireland there are substantial fisheries for *Cancer pagurus* (Bennett 1979; 1995; Brown & Bennett, 1980; Eaton *et al*., 2001; Fahy, *et al*., 2002; Howard, 1982), which although causing significant mortality, are regulated by minimum landing sizes introduced in the 19th century. Also the biology of *Cancer pagurus* protects the sustainability of the fishery as berried females do not feed and are rarely caught in baited pots (Howard, 1982). Therefore an intolerance of intermediate has been recorded.

Extraction of other species	Low	Very high	Very Low	Very low

Many of the prey items of *Cancer pagurus* are also commercially exploited especially large bivalves. If populations of prey items were overexploited it is likely that the populations of *Cancer pagurus* would either decrease or growth would be slower leading to later maturation.

Additional information

Recoverability

Female *Cancer pagurus* have high fecundity of 0.25 - 3 million eggs per spawning (Bennett, 1995) but mortality of larvae is high. Since juveniles spend the first 3 years post -settlement in the intertidal (Regnault, 1994), recovery of an adult population from a mortality event is likely to take several years. If *Cancer pagurus* were to be completely eradicated from an area, repopulation would occur by larval input from surrounding areas and adult migration (Bennett & Brown, 1983; 1976). Due to circular water movements, it is thought that at least the population around the Dogger Bank, near northeast England may self contained (Eaton *et al*., 2001) and other populations around the British Isles may be isolated from larval supply from adjacent populations as well.

Importance review

Policy/legislation

- no data -

Status

National (GB) importance	-	**Global red list (IUCN) category**	-

Non-native

Native	Native		
Origin	Not relevant	**Date Arrived**	NA

Importance information

In 1980, the fishery of *Cancer pagurus* was worth £3 million in England and Wales (Howard, 1982) and the area between Brixham and Plymouth accounted for 60% of landings (Brown & Bennett, 1980). Landings for the English Channel fishery amount to approximately 10,000 tonnes annually.

The southwest England fishery extends from Beachy Head to Lands End (Brown and Bennett, 1980) and there are also significant fisheries in North Norfolk, close to the River Humber (Eaton *et al*., 2001) and off the south-east Irish coast (Fahy *et al*., 2002). *Cancer pagurus* is caught in baited traps and highest catches are from June to November when large numbers of non-berried females are caught (Brown & Bennett, 1980). The males fetch a higher price as they are larger and females are usually processed into frozen white and brown meat (Brown & Bennett, 1980) or sold as bait for whelks *Buccinum undatum* (Fahy *et al*., 2002). Landings in the UK are restricted to crabs of a certain carapace width (CW). This Minimum Landing Size (MLS) varies somewhat. For example, the MLS for males is 16 cm in both Devon and Cornwall although for females it is 14 and 15 cm respectively. In Dorset and Hampshire the MLS if 14 cm for both male and female brown crabs. Because of the poor quality of the flesh, landing of berried or recently moulted ('soft' crabs) is banned (Brown & Bennett, 1980).

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