

Guide for the Identification of Crab Species

Atlantic & Mediterranean



Instructions on how to use this guide:



Species common name

Scientific name



Photos to help with identification



Distinguishing features



Other identifying features



Average adult carapace size (excluding legs)



Colour and pattern



Interesting facts about the species



Distribution



Similar Species



Common Shore Crab

Carcinus maenas



5 pointed, lateral teeth.



Carapace broader than it is long. 3 frontal 'lobes' between the eyes on the carapace. Back legs are stout and not flattened.



Average adult carapace: Up to 10cm.



Variable colours from green to brown and orange, smaller individuals can be patterned/have markings.



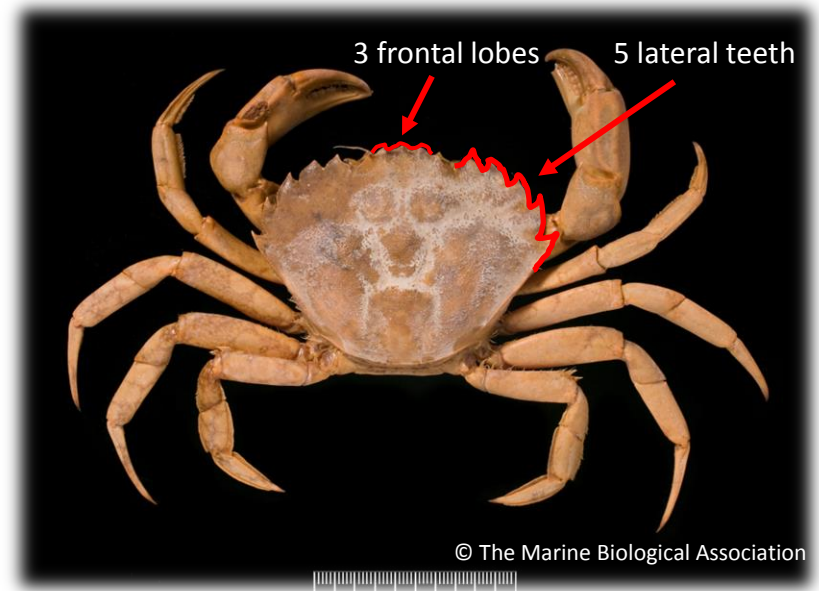
In North and South America *C. maenas* is a widespread invasive species. It is listed among the 100 "world's worst alien invasive species".



North Eastern Atlantic from northern Norway southwards to West Africa.



Not to be confused with *Carcinus aesturarii* found only in the Mediterranean.



© The Marine Biological Association



© Jack Sewell



Mediterranean Shore Crab

Carcinus aestuarii



3 smooth teeth between the eyes and 5 teeth either side of the eyes.



Carapace broader than it is long.



Average adult carapace: Up to 7cm.



Variable colours from green to brown.



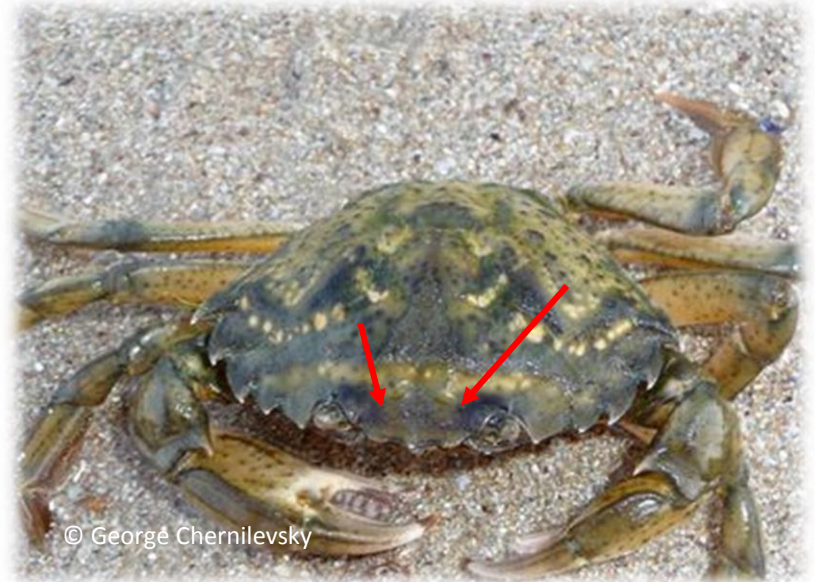
Unlike its European cousin *C. maenas* that is highly invasive worldwide, *C. aestuarii* has remained contained in the Mediterranean.



Littoral crab native to the Mediterranean Sea.



Very similar to *C. maenas*, but with longer smoother teeth between and protruding beyond the eyes. Mediterranean only.



© Georgé Chernilevsky



© Jack Sewell



Velvet swimming crab

Necora puber



Bright red eyes and carapace coated in fine brown hairs giving it a 'velvet' texture.



Flattened carapace and paddle-shaped swimming legs. 5 teeth around edge of carapace.



Average adult carapace: Up to 10cm.



The carapace is actually bluish, but is well covered by the brown hairs. The swimming legs have black stripes.



Be careful! These crabs are also known as devil crabs for their red eyes and aggressive behaviour!



Widely distributed over North-West Europe, common around all coasts of Britain & Portugal. Introduced and considered to be alien in the Mediterranean.



Young of *N. puber* without evident 'velvet' coat may resemble other swimming crabs (*Liocarcinus* spp.).





Hairy Crab

Pilumnus hirtellus



Carapace and legs densely covered with 'hairs' and fine spines.



One claw much larger than the other (usually right), 5 unequally sized teeth on sides of carapace.



Average adult carapace: Up to 3cm.



Reddish brown carapace, with cream patches on inner part of claws and banded legs.



The hairs on these crabs are club-shaped when seen under a microscope, and trap silt easily, making them well camouflaged.



From Southern Norway southwards into the Mediterranean and Black Sea.



Several other *Pilumnus* species exist in the Med but *P. Hirtellus* is the only species with club-shaped hairs.



© Dave Fenwick



© Keith Hiscock



Edible Crab

Cancer pagurus



Oval carapace has distinct lobed edge (like a pie crust).



Claws have black tips and legs are hairy.



Average adult carapace: Up to 25cm, but more typically up to 15cm.



Brown to red/ rust coloured.



The Edible crab is the most commercially important crab species in Western Europe.



Common throughout the North Sea and English Channel to the Coast of Portugal.



No other similar species found on the shore or shallow waters.





Toothed Crab

Pirimela denticulata



3 teeth between the eyes, 2 teeth around the orbits of the eyes and 5 well defined teeth along either side of the carapace.



Very small, with spiky, toothed carapace.



Average adult carapace: Up to 2cm.



Its colouring is variable from green to cream, with mottling of brown, purple or red.



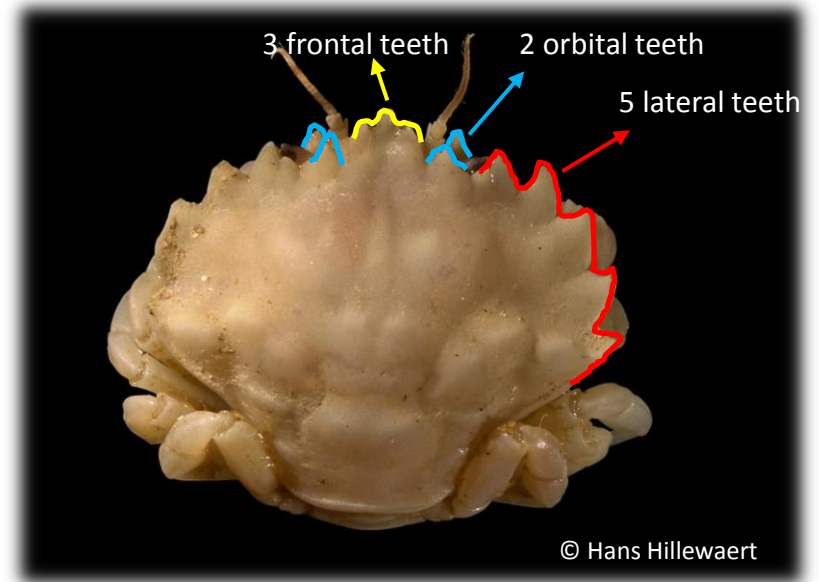
Toothed crabs live amongst marine vegetation or in tunnels in the sand.



Found in the British Isles and North Atlantic through into the Mediterranean.



May look like a juvenile *Carcinus maenas* but has more teeth on carapace.





Columbus Crab

Planes minutus



Carapace more or less rectangular, with wide eyes at the front corners of the carapace.



Hairs/spines on the last two sections of the legs, relatively smooth carapace. Most often found amongst stranded goose barnacles.



Average adult carapace: Up to 2cm, but more typically up to 1cm.



Variable colouration, often to match its surroundings.



Usually spend their lives drifting on weed, driftwood, buoys or even attached to turtles in the open ocean.



Pelagic species of the North Atlantic, can be found washed up in Sargassum weed or other debris.



Similar appearance to other grapsid crabs, including *Pachygrapsus marmoratus* but eyes more defined and carapace less square.





Marbled Rock Crab

Pachygrapsus marmoratus



Almost square carapace with diagonal ridges. Fine hair-like spines on last segment of legs.



3 teeth on both sides of the carapace with a straight edge between the eyes.



Average adult carapace: Up to 5cm.



Variable browns to almost black with a lighter marbled pattern.



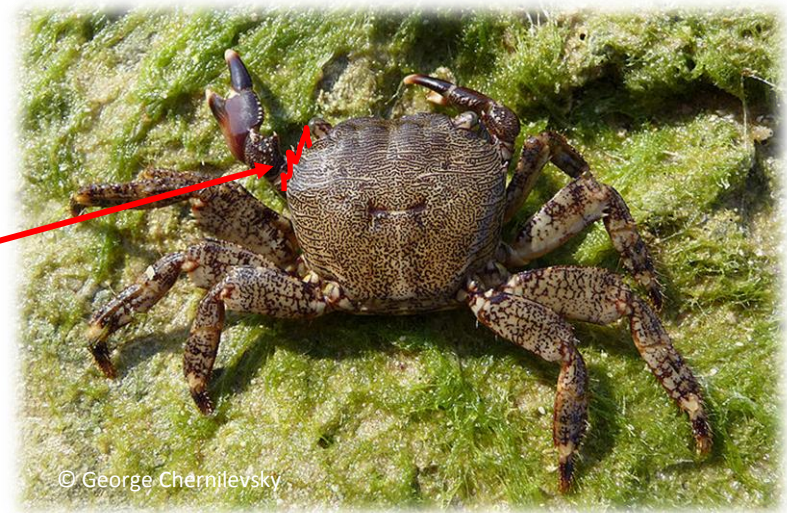
The marbled rock crab is very quick moving and can easily fit into small cracks and crevices.



European mainland Atlantic Coast and Mediterranean Sea.



This species can be distinguished from other *Pachygrapsus* species by the 3 teeth on the carapace and from *Hemigrapsus* species by the spiny projection on the first segment of the claws.



© George Chernilevsky



© Petar Milošević



Asian Shore Crab

Hemigrapsus sanguineus



Light and dark bands along legs, and dark purple-red-brown spots on top of claws.



Relatively square carapace with 3 distinct teeth on either side of the eyes. white underside to claws.



Average adult carapace: Up to 5cm.



Variable colour from brown to orange to green shades. Banding pattern on legs.



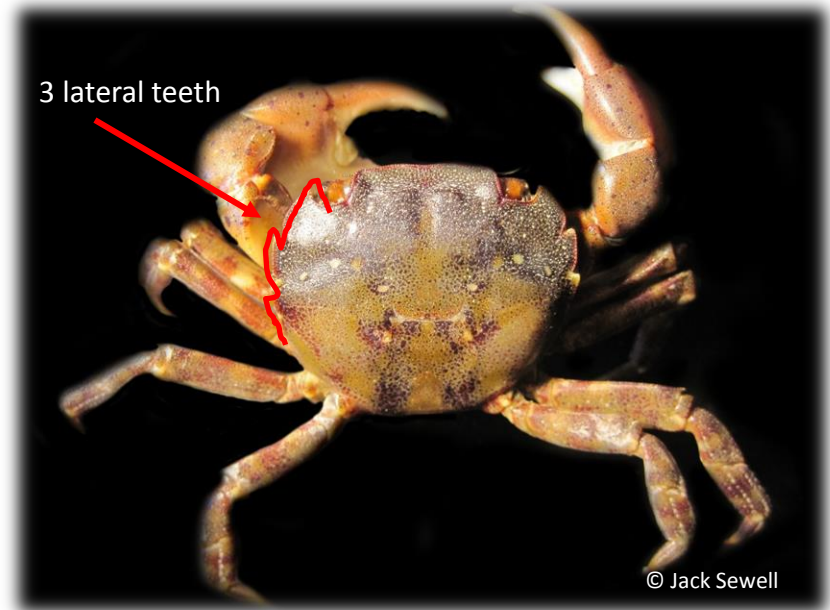
H. sanguineus tolerates a wide range of temperatures and salinities making it very good at colonising new shores.



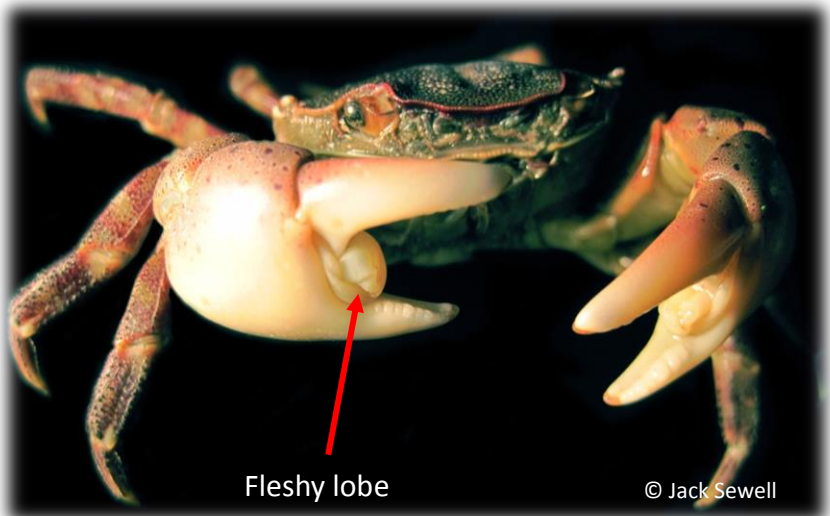
Invasive species to Europe from Japan. Specimens have been recorded from the English Channel and North Sea. Also Med and Black Sea.



Not to be confused with with *Pachygrapsus* species which lack fleshy lobe on the claw, and *H. Takanoi*, which has a fury patch on the claws.



3 lateral teeth



Fleshy lobe



Brush-clawed Crab

Hemigrapsus takanoi



Tiny dark spots on carapace, legs and claws (never on abdomen).



Adult males have patches of fur on claws. Relatively square carapace, with 3 teeth on each side, third of which is very small.



Average adult carapace: Up to 3cm.



Variable colour from brown to orange to green shades.



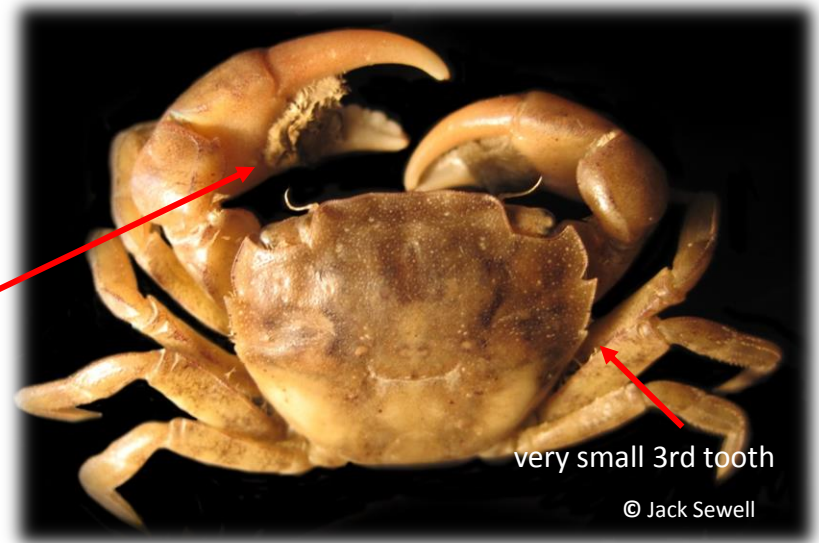
It was first introduced to Europe in the mid 1990s.



Native to Japan and China, this Crab is an invasive species to the coasts of Europe.



Similar to *H. sanguineus* but *H. takanoi* is smaller, does not have banding and 3rd tooth very small. Also similar to *Pachygrapsus* species which lack fleshy lobe on the claw.



© Jack Sewell



© Hans Hillewaert



Chinese Mitten Crab

Eriocheir sinensis



Adults have fur “gloves/mittens” on their claws.



White tipped claws. Carapace almost square. Front with four conspicuous teeth. Long walking legs.



Average adult carapace: Up to 6cm.



Greyish-green to dark brown, legs lighter.



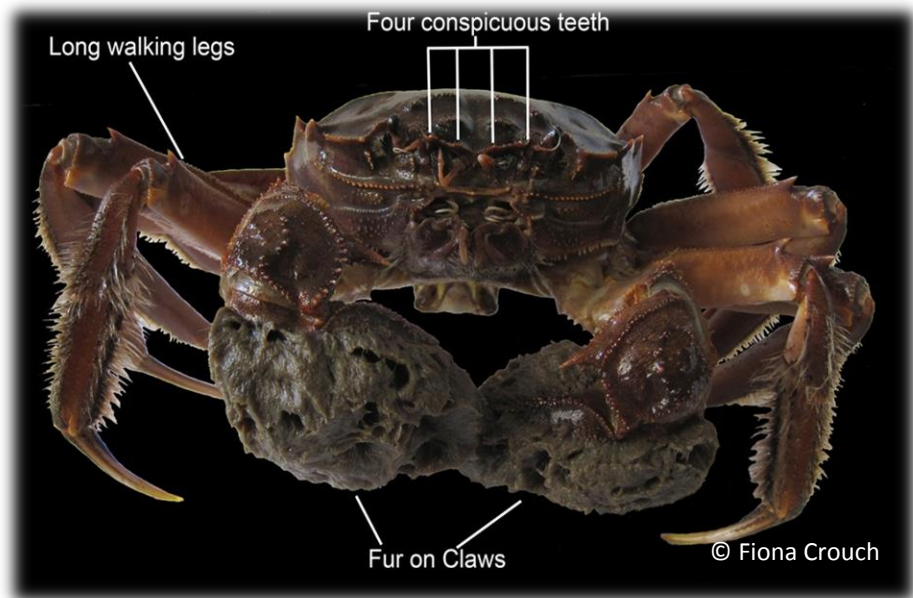
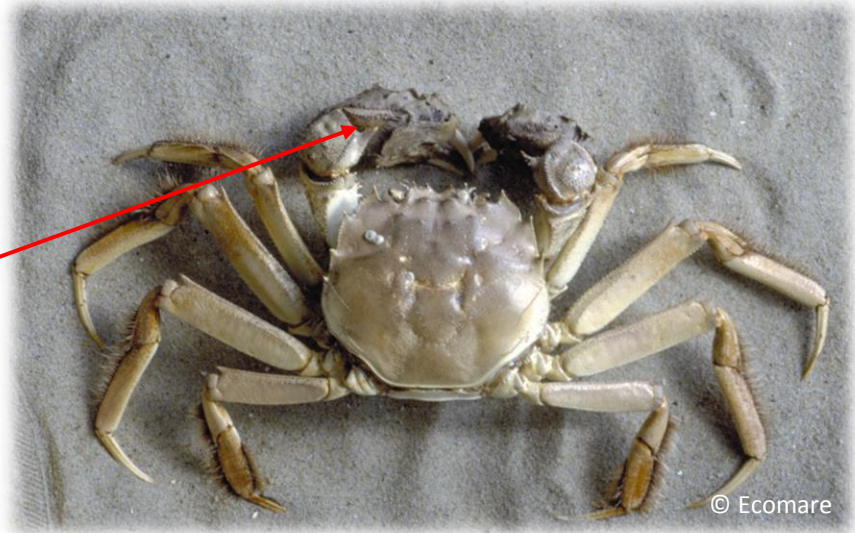
On the list of the 100 most invasive species in the world. Migrates in large numbers annually from upper river to sea to reproduce.



Freshwater crab, native to south China and now widespread across Europe estuaries causing damage to river banks and fishing.



Not to be confused with *Carcinus maenas*, which lacks hair on the claws and has more triangular shell.





Warty Crab

Eriphia verrucosa



Warts/spots on the claws and at the front of the carapace.



6-7 sharp teeth on each side of carapace and 5-6 frontal spines in two rows with a serrated appearance between the eyes.



Average adult carapace: Up to 9cm.



Brownish-red to brownish-green with yellow spots.



This species is threatened by pollution, fishing and eutrophication.



Found in the eastern Atlantic Ocean, the Mediterranean and is in decline in the Black Sea.



May resemble other xanthid species (e.g. *Xantho* spp.), which lack spots on the claws.



©Agatha Gill



©George Chernilevsky



Furrowed Crab

Xantho hydrophilus



Deeply furrowed carapace with dark-tipped claws.



Some hairs on legs, 5 wide-angled teeth on each side of carapace.



Average adult carapace: Up to 7cm.



Variable shades of brown with black tipped claws. Colour more variable (grey, white, brown) in smaller individuals.



These crabs (especially males) have large claws that they will spread out when discovered.



Extending from the British Isles north to west Norway and south to the Mediterranean.



Very similar to *X. pilipes*, but carapace has deeper furrows, relatively wider and with fewer hairs on the legs. Also similar to *X. poressa*, which has more rounded carapace.





Risso's crab

Xantho pilipes



Dense fringe of hairs on the side and underside of the carapace.



Slightly furrowed carapace, pair of lobes between the eyes. Claws slightly unequal.



Average adult carapace: Up to 6cm.



Patchy colours of light brown/red/ pink to yellow/cream. Occasionally intricately patterned. Dark tips on claws.



These crabs are often found under rocks buried down into the sand.



Extending from the British Isles north to west Norway and south to the Mediterranean.



Very similar to *X. hydrophilus* but with dense fringe of hairs on legs and underneath carapace, and *X. poressa*, which has more rounded carapace.



© Jack Sewell



© Dave Fenwick



Purple Crab

Xantho poressa



Underside with numerous spotty markings.



Flat, smooth, oval-shaped carapace. No hairs at the front of the carapace and little hair on the legs.



Average adult carapace: Up to 2.5cm.



Brownish grey back, more or less dark, with light and dark spots forming patterns.



This crab is sometimes called the jaguar crab due to its spotty markings.



Native to the Black Sea, the Mediterranean Sea, and parts of the eastern Atlantic Ocean.



Very similar to *X. Hydrophilus*, which has a deeply furrowed carapace and lacks the underside spots and *X. pilipes* which has dense fringe of hairs on legs.





Masked Crab

Corystes cassivelaunas



Obvious antennae longer than body (may be broken).



Antennae covered with bristles (setae).
Surface of carapace is rough and oval shaped.



Average adult carapace: Up to 4cm long and 3cm wide.



Reddish brown to yellow.



When buried in the sand, the bristly antennae are used as a breathing tube. Like a snorkel!



From Norway and Sweden to Portugal and the Mediterranean. Typically found burrowed in sand.



No other similar species.



© Dave Fenwick



© Dave Fenwick



Circular Crab

Atelecyclus rotundatus



Round, rough textured carapace with hairy edge.



Longer second antennae and 9-11 sharp teeth to the front and side of the carapace.



Average adult carapace: Up to 5cm.



Light-reddish brown sometimes with cream markings.



A. Rotundus buries itself backwards into the substrate and uses it's claws and antennae to create a breathing channel.



British Isles down the west coast of Europe into the Mediterranean Sea.



No to be confused with *Corystes cassivelaunas* which has a carapace longer than it is wide. May also resemble young edible crab, which lack the pointed teeth and hair.



© Valela



© Dave Fenwick



Say Mud Crab

Dyspanopeus sayi



Small crab. The carapace is strongly convex (curved like the exterior of a sphere). Right claw stouter, left one narrower.



Finely granular surface and a light covering of hair, especially towards the front and sides.



Average adult carapace: Up to 2cm.



Carapace is olive-green to brown, with black claw tips.



Males are sometimes reported to be more abundant than females.



Native to the Western Atlantic Ocean, but is now also found along the Eastern Atlantic coast, Med and North sea.



Not to be confused with *Rhithropanopeus harrisi*, which has withish claw pincers.



© flickr, Crabby Taxonomist



© Francois Lambert



Dwarf Crab

Rhithropanopeus harrisi



Whitish claw pincers.



2 rows of minute lobes on the front of the carapace. Unequal and smooth claws.



Average adult carapace: Up to 2cm.



Olive green to light brown colour, sometimes with lights spots on carapace.



This species is likely to have spread into Europe via ship fouling on commercial vessels.



Invasive species across much of European coastlines, native to the Atlantic coast of North America.



Similar to *Neopanope sayi*, which was also introduced from North America and is generally reddish-brown in colour with claw pincers dark brown to black.





Sponge Crab

Dromia personata



Rounded body covered in encrusting sponge and pink tipped claws.



Hairy body and legs. Round, almost 'inflated' appearance. Small 4th & 5th legs.



Average adult carapace: Up to 7cm.



Brown to red with orange/yellow/brown sponge attached.



Sponge crabs use sponges as portable shelter. The sponge will continue to grow as the crab grows.



Found occasionally in the North Sea and English Channel and in the Mediterranean.



No other similar species.



© Sue Daly



© Keith Hiscock



Blue Swimming Crab

Callinectes sapidus



Strong lateral spine pointing outwards, which is one of the carapace's 9 teeth. Carapace twice wider than it is long.



Smooth carapace with scattered transverse lines of fine granules. Paddle-shaped swimming legs.



Average adult carapace: Up to 22cm.



Greyish, bluish, or brownish green of varying shades and tints dorsally on carapace and claws.



Soft shell Blue crabs are a highly favoured delicacy in the USA, with more commercial value than hard shell ones.



Native to Western Atlantic but is now rather abundant in parts of the northern and eastern Mediterranean.



Not to be confused with *Portunus pelagicus*, which does not have an obvious second spine on the claw segment.

©The Children's Museum of Indianapolis





Pennant's Swimming Crab

Portumnus latipes



White spots on the carapace. 3 frontal small subacute teeth, with the one in the middle slightly in advance.



Carapace as broad as it is long, heart-shaped and smooth. Paddle-shaped swimming legs. Large orbits.



Average adult carapace: Up to 2cm.



Reddish with white shading.



It can dig itself into wet sand very rapidly using the back legs, which are much smaller than those of the other swimming crabs.



Widespread around Europe including North Sea; northern Adriatic, Aegean, western Black, and eastern Mediterranean Seas.



Not to be confused with *Thia scutellata* which has hair around the body and legs and lacks teeth around carapace.





Henslow's Swimming Crab

Polybius henslowii



Carapace has circular shape with end of walking legs flattened.



Carapace flat, with 5 low, broad lateral teeth. Rear legs flattened like paddles.



Average adult carapace: Up to 4cm.



Reddish brown to orange with a blue hue.



Often found in large numbers swimming at the waters surface feeding on sardines, squid and other pelagic animals.



East Atlantic, from British Isles into the West Mediterranean (very common off the Spanish and Portuguese coasts).



No other similar species.



© Dave Fenwick



© Dave Fenwick



Flower crab

Portunus pelagicus



Broad carapace, with 9 blunt teeth. Spine on the second segment of the claw from the body.



Paddle-shaped swimming legs. Claws are long, spiny and ridged.



Average adult carapace: 7cm.



Carapace greenish-brown with irregular pale mottling. Claws and legs blue to black and also mottled.



This is a nocturnal marine crab, that is an important commercial crab species.



Native to the Indo-Pacific Ocean, but now also found in the eastern part of the Mediterranean.



Not to be confused with *Callinectes sapidus* with similar carapace but does not have second spine on the claw.



© Wikimedia Commons



© AhmadElq



Sally lightfoot crab

Percnon gibbesi



Golden yellow rings on joints of walking legs and slim disk-like carapace.



Walking legs have a row of spines on section closest to the carapace.



Average adult carapace: Up to 3.7cm.



Greenish brown above; a stripe of white or pale blue on leg joints, underside of carapace pale.



The most invasive true crab to have entered the Mediterranean Sea.



Native to the Pacific and Atlantic coasts of the Americas and Africa, but now also widespread in the Eastern Mediterranean.



Similar banding on legs to some *Pachygrapsus* species.





West African Fiddler Crab

Afruca tangeri



Long eye stalks. Males characterised by extreme claw asymmetry.



Rough textured carapace.



Average adult carapace: Up to 5cm.



The carapace is violet to black, or yellowish in females, appendages are yellowish brown.



The larger claw in the males is used for communication with other crabs.



Afruca tangeri has only been recorded on the South coast of Portugal and Atlantic south coast of Spain.



No other similar species.



Afruca tangeri
© Charlesjsharp



Afruca tangeri
© LeonardoG



Spider crabs

Majidae (Family)



Carapace longer than it is broad covered in several short, pointy, spines and usually covered in algae. Long spider-like legs.



Some species are very large and spiny, with others small and delicate.



Variable sizes from carapace length of 1cm up to 20cm.



Variable body colours from brown to red to cream.



The genus *maja* includes the largest Atlantic species *Maja brachydactyla* which can have a body up to 20cm long.



Widespread in Europe from Scandinavia to the Mediterranean sea.



No other similar group of species.



© Fiona Crouch



© Hannah Milburn



Swimming crabs

Liocarcinus (Genus)



Flattened, paddle-shaped swimming legs.



3 frontal lobes between the eyes, apart from *L. arcuatus*. 5 teeth either side of the eyes.



Average adult carapace: Up to 5cm.



Variable browns to yellows, variegated, and sometimes with patches.



Swimming crabs used their flattened back legs to swim instead of walk.



Widespread in Europe. *L. holsatus* does not occur in the Mediterranean.



Callinectes sapidus and *Portunus pelagicus* also have paddle-shaped swimming legs.



Liocarcinus depurator
© David Fenwick



Liocarcinus depurator
© Keith Hiscock



Nut crabs

Ebalia (Genus)



Small crabs with very small eyes and orbits.
Relatively diamond shaped carapace.



'Swollen' looking carapace.



Average adult carapace: Up to 1.7cm.



Variable from light orange to yellow/cream,
sometimes spotted red, dark red or white.



In females, the back of the carapace tends to be
more V shaped.



Widespread in Europe. *E. Tumefacta* does not
occur in the Med.



No other similar species.



Ebalia tumefacta
© Paula Ferris



Ebalia tumefacta
© Hans Hillewaert



Hermit crabs

Paguridae (Family)



Hermit crabs live in empty sea snail shells, such as dog whelk shells. They do not have a hard carapace.



Eyes on stalks, will often retreat into their shells when disturbed.



Average adult: 3.5cm (excluding shell).



Variable shells, with variable body colours from brown to red to cream, sometimes patterned.



As hermit crabs grow they will move from one shell to another, better fitting shell.



Widespread in Europe from Scandinavia to the Mediterranean sea.



No other similar group of species.

You might find us, we only have 6 legs so we aren't true crabs!



Diogenes pugilator
© David Fenwick



Pagurus prideaux
© Keith Hiscock



Porcelain Crabs

Porcellanidae (Family)

You might find us, we only have 6 legs so we aren't true crabs!



Pisidia longicornis
© David Fenwick



Small crabs with carapace nearly circular, flat and smooth. Antennae very long.



Only have 3 pairs of walking legs visible.



Average adult carapace: 1.5cm.



Variable from muddy brown to orange and red.



Porcellana platycheles can often be found flattened against the underside of rocks and are very well camouflaged.



Widespread in Europe from Scandinavia to the Mediterranean sea.



No other similar species.



Porcellana platycheles
© David Fenwick



Squat lobsters

Galatheidæ (Family)



Carapace longer than wide, with tail curved underneath body.



Long antennae and long claws.



Average adult carapace: 9cm.



Variable colours from brown to red, with patterns and striations.



Relatively mobile species, moving by crawling or swimming (sometimes backwards).



Widespread in Europe from Scandinavia to the Mediterranean sea.



No other similar species.

You might find us, we only have 6 legs so we aren't true crabs!



Galathea squamifera
© David Fenwick



Galathea intermedia
© Fernando Herranz Martín