Arthropods

31205 species in Sweden. The biggest group, the hexapods are treated in a separate presentation. The other three groups are Chelicerata, Myriopoda and the crustaceans.

Nearly all arthropods are easily recognisable by a hard exoskeleton and a large number of appendages, one from each body segment.

Chelicerata has 1906 species in Sweden. They are all characterized by eight legs, and head and body fused into one (cephalothorax). Mostly terrestrial, but some species are aquatic.

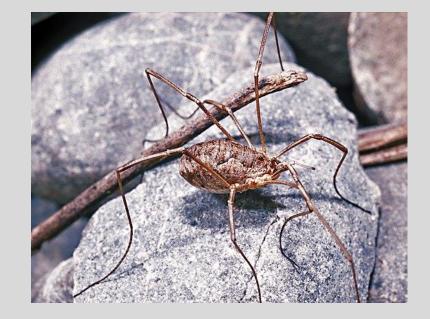
Myriopods has 97 species in Sweden. There are four classes but only two the Diplopoda and Chilopoda are big enough to likely ever be seen by most people. Myriopoda has two body parts, a head and a body but no distinct abdomen. All body segments have one pair of legs.

Crustaceans has 1578 species in Sweden. They are heterogeneous but generally has three distinct parts, a head with appendages adapted for feeding, a body with appendages adapted to walking and an abdomen which often has reduced or shorter appendages, but sometimes appendages for swimming.

Nearly everything you encounter in Sweden which is visible to the naked eye is included in one of the groups discussed but many microscopic forms, several parasites and a few deep water marine organisms are not discussed and some introduced animals who have not yet established themselves in Sweden may not be correctly identified.

Arachnida: Arachnids/Spindeldjur











Pseudoscorpiones Pseudoscorpions/Klokrypare





Identification

- Pear-shaped or round body.
- Two scorpion-like claws.

Potential misidentifications

• No similar species in Sweden.

Habitat

- In leaf litter, moss, hollow trees, or in the case of one species, indoors. Predators on other small invertebrates.
- Venomous (but cannot penetrate human skin).



1 – 7 mm



Arthropoda

Arachnida

Acari Mites/Kvalster







Identification

- No visible division between cephalothorax and abdomen.
- Oval body.
- Eight legs, each with six segments.

Potential misidentifications

• Misidentifications are unlikely although only a small number of species are visible to the naked eye.

Habitat

- Primarily on land or in freshwater, but a few species in saltwater.
- Predators, herbivores or parasites.
- Many species uses beetles or other insects to transport them between food sources.

0.1 – 7 mm

3 nested within

Ixodida Ticks/Fästingar





Filled with blood

Identification

- Mites with flattened, hardened bodies.
- Can be very swollen and round when filled with blood.
- Mouthparts form a hardened "beak".

Potential misidentifications

• Other mites lack the clear beak.

Habitat

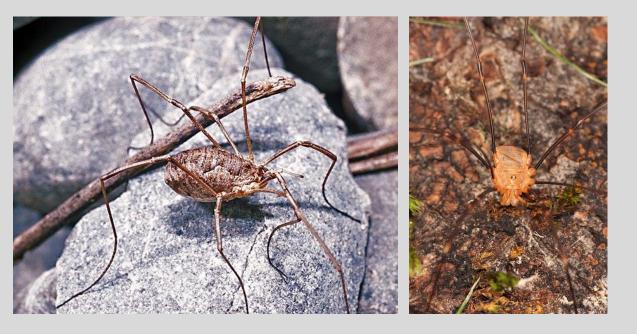
• Blood-sucking parasites on various vertebrates.

Body size (unfed) 2 – 5 mm



Arthropoda

Opiliones Harvestmen/Lockespindlar





Identification

- Abdomen, thorax and head fused into a single round body.
- Generally with very long, thin legs (but see Arthropod nr. 5).

Potential misidentifications

 Long-legged spiders particular Long-bodied cellar spider (Arthropod nr. 7) are sometimes mistaken for harvestmen but all spiders have clearly separated abdomen and cephalothorax.

Habitat

• Various terrestrial habitats, on the ground or in vegetation.



5 nested within

Arthropoda

Arachnida

Opiliones (23 Swedish species)

Nemastoma sp. Nemastoma/Fläcklockar



Identification

- Very short legs for a harvestman.
- Nearly all specimens are black with two distinct white spots.

Potential misidentifications

 The few individuals without white spots can be mistaken for the rare *Mitostoma chrysomelas* (not in Western Sweden) but it is brownish rather than black.

Habitat

• Common in litter of forest floor or in mosses.

Nemastomatidae

Araneae Spiders/Spindlar









Identification

- Body separated into abdomen and head/thorax (cephalothorax).
- Males with "boxing glove" appendages at the mouth (pedipalps).
- Varying number of ocelli (eye spots).
- Many but far from all create nets to catch food.

Potential misidentifications

 Often mistaken with harvestmen (Arthropod nr. 4) but harvestmen have head, thorax and abdomen fused into one.

Habitat

 In all terrestrial habitats – on the ground, in low vegetation or in trees. A few species semi-aquatic, one species amphibious.

1.5 – 24 mm

7-15 nested within

Arachnida

Pholcus phalangioides Long-bodied cellar spider/Större dallerspindel





Identification

- Extremely long legs.
- Large, randomly arranged open webs.

Potential misidentifications

- *P. opilionides* (only in Skåne) is similar but smaller (3-5.5 mm).
- Harvestmen (Arthropod nr. 4) have similarly long legs, but with cephalothorax and abdomen fused.

Habitat

 Mostly indoors, also in caves. Vibrates its body intensely to scare off predators from its net.

Body size

7 – 10 mm



Arthropoda

Arachnida

Araneae

Pholcidae

Agelenidae Funnel weavers/Trattspindlar





Identification

- Two conspicuous spinners at the end of abdomen distinctly larger than in other spiders.
- Covered in hairs.
- Relatively long legs.
- Funnel-shaped webs.

Potential misidentifications

 If seen outside net mistakable for wolf spiders (Arthropod nr. 9), but these lack conspicuous spinners at the back.

Habitat

• Various habitats, usually on the ground. A couple of species common in cellars.



Arthropoda

Arachnida

Araneae

Lycosidae Wolf spiders/Vargspindlar









Identification

- Covered in dense hair, relatively robust.
- Often with clear markings and patterns.
- Legs oriented out from body.
- Females often carry white egg-sack under abdomen.

Potential misidentifications

 Funnel weavers (Arthropod nr. 8), but these have two conspicuous spinners at the back. Next two groups (Arthropod nr. 10-11) look similar but has distinct coloration.

Habitat

 On the ground, especially in open habitats (e.g. heathlands) but also in forests. Active predators – they do not spin nets to catch prey.

2.8 – 17 mm

Arthropoda

Arachnida

Araneae

Dolomedes sp. Fishing spiders/Kärrspindlar



Identification

- Large, often with all legs held stretched outward, making it look even larger.
- Brown, with light stripes along the sides.

Potential misidentifications

• Similar to a wolf spiders (Arthropod nr. 9), and the nursery web spider (Arthropod nr. 11) but clearly distinct by size and coloration.

Habitat

- Swampy areas, often hunting on water surface.
- Active hunters not using webs to catch food.





Body size

9 – 20 mm

Arthropoda

Arachnida

Araneae

Pisauridae

Pisaura mirabilis Nursery web spider/Presentspindel







Identification

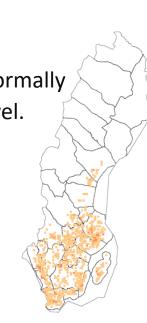
- Medium to large spiders, often with all legs held stretched outward.
- Light brown body with one very light stripe down the centre of body.

Potential misidentifications

Superficially similar to a wolf spiders (Arthropod nr. 9), and fishing spiders (Arthropod nr. 10) but clearly distinct by coloration.

Habitat

- Generally found in open vegetation, normally in vegetation rather than at ground level.
- Active hunters not using webs to catch food.



Arthropoda

Arachnida

Araneae

Pisauridae

LC

Salticidae Jumping spiders/Hoppspindlar





Salticus scenicus



Marpissa muscosa



Evarcha falcata

Identification

- Square, flat face with two large and two smaller forward-pointing eyes.
- Short, stocky body.
- Relatively robust legs, generally held close to body.
- Moves in quick, snappy bursts and jumps.

Potential misidentifications

• Easily distinguished by body shape and the charismatic face.

Habitat

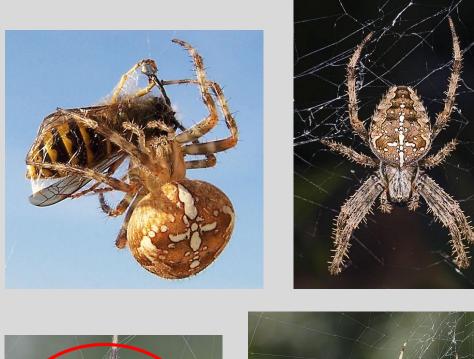
 Various, generally open habitats, on rocks, house walls etc. Active predators – they do not spin nets to catch prey.

1.7 – 10 mm

Arthropoda

Arachnida

Araneus diadematus European garden spider/Korsspindel







Identification

- With a characteristic white cross pattern on abdomen.
- Female with large round abdomen, male smaller with thinner abdomen.
- Circular web.

Potential misidentifications

• Four-spot orb-weaver (Arthropod nr. 14) is similar, but has four white spots in a square pattern rather than the cross.

Habitat

 In bushes and other low vegetation in various habitats – woods, heathland, gardens etc.

Body size (F)	
Body size (M)	



Araneae

Araneus quadratus Four-spot orb-weaver/Kvadratspindel



Identification

- Abdomen yellow to red.
- With four distinct white spots on abdomen.
- Female with large round abdomen, male smaller with thinner abdomen.
- Circular web.

Potential misidentifications

• European garden spider (Arthropod nr. 13) is similar, but has a cross rather than four white spots.

Habitat

 Builds webs in low vegetation in open habitats, meadows etc.

Body size	(F)	9
Body size	(M)	6

Arachnida

Araneae



Argyroneta aquatica Water spider/Vattenspindel





Identification

- Two back pair of legs dense with long, thin hairs.
- Abdomen covered in fine, grey, silky hairs that trap air when under water.
- Only spider in the world that can dive below water.

Potential misidentifications

- No other species has long hairs on the two back legs only.
- Nearly always also identifiable by habitat.

Habitat

• Only spider in the world spending substantial time under water.

Body size

8 – 15 mm

Arthropoda

Arachnida

LC

Diplopoda: Millipedes/Dubbelfotingar





Diplopoda Millipedes/Dubbelfotingar





Identification

- Segments grown together two and two so there are two pairs of thin, short legs per "segment".
- Legs oriented down under the body.
- Body usually cylindrical.

Potential misidentifications

 Woodlice (Arthropod nr. 27) have fewer legs (seven) and are shorter. Centipedes (Arthropod nr. 19-21) have longer legs.

Habitat

• Various habitats, usually not too dry (forest litter, dead wood, etc). They eat dead plant material.

17-18 nested within

.

Glomeris marginata Pill millipede/Klotfoting







Identification

- Short, heavily armored millipede.
- Capable of rolling into a ball.
- Shiny black with yellowish edges to each segment
- 17 (females) or 19 (males) pairs of legs.

Potential misidentifications

 Pill bugs (Arthropod nr. 30) are similar, but pill millipedes roll into asymmetrical balls and are usually darker (black) in colour and only has 7 pairs of legs.

Habitat

• In leaf litter.



7 – 20 mm



Arthropoda

Diplopoda

Glomerida

Glomeridae

LC

Polydesmida Polydesmida/Banddubbelfotingar



Polydesmus denticulatus



Oxidus gracilis



Identification

- Millipedes with distinct outgrowth on the sides making the millipedes look flat whereas other millipedes look round.
- 18-19 body rings (each with two pairs of legs) in adults.
- No eyes.

Potential misidentifications

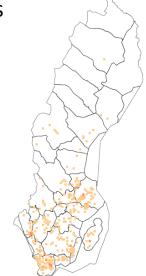
 Most other millipedes lack the outgrowths and therefore look rounder. Only one other family (Craspedosomatidea/ Knöldubbelfotingar) has similar outgrowths but they have 25 body rings and distinct eyes.

Habitat

• Similar to other millipedes.



4.5 – 21 mm



Chilopoda: Centipedes/Enkelfotingar









Geophilomorpha Soil centipedes/Jordkrypare





Identification

- One pair of relatively long legs per body segment.
- Large, powerful mandibles.
- Very long, slender, with flexible body.
- Usually pale (white or yellowish).
- At least 31 pairs of legs.

Potential misidentifications

• Readily identifiable by leg number.

Habitat

- Found in leaf-litter, under rocks, in old logs etc.
- Fast and active predators of other invertebrates

Body size

10 – 60 mm



Arthropoda

Chilopoda

Lithobiomorpha Stone centipedes/Stenkrypare





Identification

- One pair of relatively long legs per body segment.
- Large, powerful mandibles.
- Relatively robust.
- Body surface hard, brownish/reddish.
- 15 pairs of legs.

Potential misidentifications

• Similar to scolopenders (Arthropod nr. 20) but scolopenders have 21 pairs of legs.

Habitat

- Found in leaf-litter, under rocks, in old logs etc.
- Fast and active predators of other invertebrates.

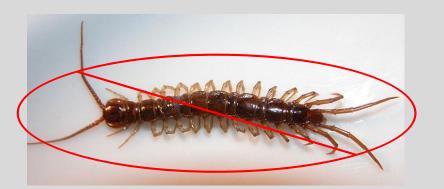


Arthropoda

Chilopoda

Cryptops sp. *Cryptops/*Småskolopendrar





Identification

- One pair of relatively long legs per body segment.
- Large, powerful mandibles.
- Relatively robust.
- Body surface hard, brownish/reddish.
- 21 pairs of legs.

Potential misidentifications

• Stone centipedes (Arthropod nr. 19) look similar but only has 15 pairs of legs.

Habitat

• Rare and mainly seen in parks.

Body size

15 – 30 mm



Arthropoda

Thecostraca: Barnacles/Rankfotingar



Thoracica Barnacles/Havstulpaner







Identification

- Adults are sessile and attached to substrate with calcareous plates or rarely with a muscular stalk where the plates are attached to.
- Adults have legs that are transformed into filtering arms.

Potential misidentifications

• No similar species in Sweden.

Habitat

- Brackish or marine.
- Attached to substrate or other organisms.

Diameter

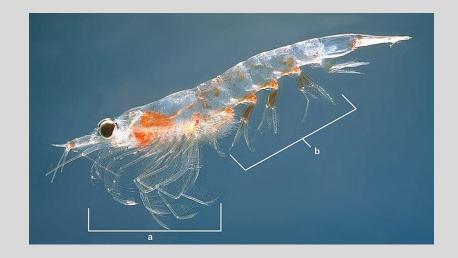
Up to 4 cm



Arthropoda

Malacostraca: Malacostraca/Storkräftor







Malacostraca Malacostraca/Storkräftor







Identification

- Head with five segments. ۲
- Thorax (middle body) with eight segments. ۲
- Five to eight pairs of the appendages from thorax large and leglike, the last zero to three small and serving as functional mouthparts.
- Abdomen (tail) with six (rarely seven) segments. ۲

Potential misidentifications

No similar groups in Sweden. ٠

Habitat

- Terrestrial, freshwater or marine water. ۲
- Marine groups either pelagic (living in free water masses) or on soft or hard bottoms.

Up to 64 cm

24-46 nested within

Mysida Opossum shrimps/Pungräkor





Identification

- Slender.
- Eight pairs of legs.
- Stalked eyes.
- Soft exoskeleton.
- No visible gills.

Potential misidentifications

• Can be mistaken for krill (Arthropod nr. 25) or true shrimps (Arthropod nr. 34) but identifiable by the number of legs and lack of visible gills.

Habitat

- Freshwater, brackish and marine waters.
- Marine species from intertidal to 100 meters.

10 – 30 mm

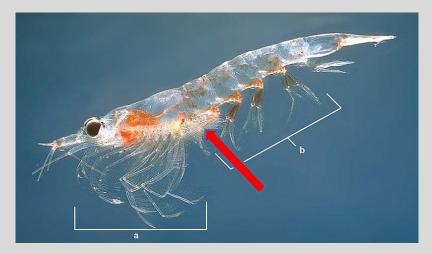


Arthropoda

Malacostraca

Mysida (45 Swedish species)

Euphausiacea Krill/Krill





Identification

- Straight body outline.
- Parts of gills sticking out of carapace (see arrow).
- Seven pairs of legs.

Potential misidentifications

 Can be mistaken for opossum shrimps (Arthropod nr. 24) or true shrimps (Arthropod nr. 34) but different numbers of legs and identifiable by large visible gills.

4 – 15 mm

Habitat

- Marine.
- Pelagic.

Body size

Coastal and deep waters.



Arthropoda

Malacostraca

Amphipoda Amphipods/Märlkräftor



Identification

- Caprillidea (Arthrropods nr. 27) is a subgroup that looks very different and discussed separately.
- Body sideways flattened, with curved back.
- Seven pairs of legs, some held backwards and some forwards, and several swimming appendages in the back.
- Modified claw-like appendages and two pairs of antennae.

Potential misidentifications

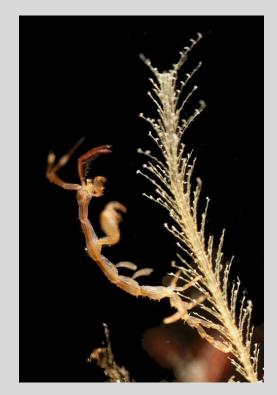
 Isopods (Arthropods nr. 28) but they are flattened from the trop rather than from the side.

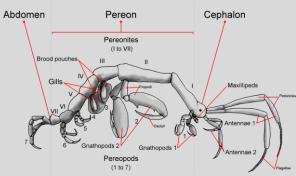
Habitat

• In aquatic environments, both fresh and saltwater, or on beaches.

27 nested within

Caprellidae Skeleton shrimps/Spökräkor





Identification

- Extremely elongated body.
- Seven pairs of legs but first legs is modified as a claw.

Potential misidentifications

• No similar species in Sweden.

Habitat

- All species are marine.
- Most species found in shallow water, normally seen attached to substate as in picture.



Up to 20 mm



Caprellidae (10 Swedish species)

Arthropoda

Isopoda Woodlice & sealice/Gråsuggor och tånglöss





Identification

- Rigid, segmented exoskeletons.
- Two pairs of antennae.
- Flattened from the top.
- Seven pairs of legs.

Potential misidentifications

• No similar species in Sweden.

Habitat

- Land-living, freshwater, brackish or marine.
- The aquatic ones are nearly always benthic.





Body size

Up to 90 mm



29-32 nested within

Arthropoda

Malacostraca

Isopoda (144 Swedish species)

Oniscidea Woodlice/Landgråsuggor





Identification

• Only terrestrial isopods (and only terrestrial crustaceans in Sweden).

Potential misidentifications

 Millipedes (Arthropod nr. 16) have more pairs of legs and usually longer bodies. Amphipods are laterally flattened.

Habitat

Feeding on organic debris in various moist places,
e.g. leaf litter, under rocks etc.



1.5 – 30 mm



Arthropoda

Malacostraca

Isopoda

30-31 nested within

Armadillidiidae Pill bugs/Klotgråsuggor







Identification

- Heavily armored, grey-black (but color varies).
- Can roll into a ball.

Potential misidentifications

• Pill millipedes (Arthropod nr. 17) are often confused with it, but it has more legs.

Habitat

• In leaf litter.





Arthropoda

Malacostraca

Isopoda

Oniscidea

Ligia oceanica Sea slater/Strandgråsugga





Identification

- Very large (for an isopod).
- Antennae with many segments (10-20).

Potential misidentifications

- Other woodlice are smaller and with fewer antennal segments.
- Pond slaters (Arthropod nr. 32) looks similar but has an enlarged body segment at the back and a body that tapers towards the front.

Habitat

• Lives amphibiously on dead organic matter on the seacoast.

Body size

~30 mm



Arthropoda

Malacostraca

Isopoda

Oniscidea

Asellidae Pond slaters/Sötvattengråsuggor





Identification

- Final body segment large, with two long branched appendages.
- Long, thin antennae.
- Body tapering towards the front.

Potential misidentifications

 Sea slater (Arthropod nr. 31) is larger, has a different body shape and not the same enlarged final segment.

Some similar looking species are found in marine environments but are separatable by habitat.

Habitat

• In lakes and ponds rich in organic debris.

Body size

8 – 12 mm



Arthropoda

Decapoda Decapoda/Tiofotade kräftdjur







Identification

- Fused head and thorax segments (=cephalothorax).
- Five leg pairs of legs, one of them may be modified to be claws.
- Abdomen may be folded onto thorax in some groups (as in crabs).
- Stalked eyes

Potential misidentifications

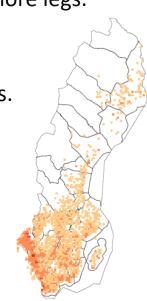
• Opossum shrimps and krill (Artrhopod nr. 24-25) looks similar to some species but has more legs.

Habitat

- Freshwater, brackish and marine waters.
- Marine groups either pelagic or on soft or hard bottoms.

Body size

Up to 64 cm



34-46 nested within

Caridea True shrimps/Egentliga räkor







- Only distinctly "shrimp-like" decapods.
- Abdomen distinctly segmented.

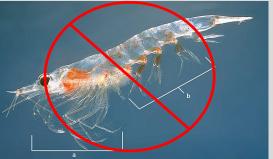
Potential misidentifications

• Opossum shrimps and krill (Artrhopod nr 23-24) looks similar but has more legs.

Habitat

- Marine or brackish water.
- Either pelagic or on soft or hard bottoms.





Body size

Up to 19 cm



Arthropoda

Malacostraca

Decapoda

Caridea (45 Swedish species)

Nephrops norvegicus Norway lobster/Havskräfta



Identification

- Similar body shape to a lobster but narrower.
- Pale orange color.
- Spiny claws.
- Kidney-shaped eyes.

Potential misidentifications

• No similar species in Sweden.

Habitat

- Marine.
- Soft bottoms.
- Borrows for shelter during daytime.
- Usually 40-800 meters depth but can occur at 20 m.

Arthropoda

Malacostraca

Decapoda

LC

Homarus sp. Lobsters/Humrar





Identification

- Usually black, sometimes blue, yellow or light ۲ brown.
- Large claws, one larger than the other one. ٠

Potential misidentifications

No similar species in Sweden. ۲

Habitat

- Marine. ۲
- Rocky bottoms. ٠
- Sometimes hides in clefts or among rocks. ٠
- Shallow, rarely below 40 m. ۲
- In summer they can occur intertidally. ٠



Up to 64 cm



Arthropoda

Malacostraca

Decapoda

Nephropidae

Homarus sp. (2 Swedish species)

Pacifastacus leniusculus Signal crayfish/Signalkräfta





Identification

• Blueish to reddish brown crayfish with white or bluegreen markings at the claw joints.

Potential misidentifications

 The European crayfish (Arthropod nr. 38) looks similar, but without light marks at the claw joints and with smaller claws.

Habitat

- Invasive species from North America.
- Freshwater.

Body size

• In both running and still water.



Arthropoda

Malacostraca

Decapoda

Astacidae

App. 20 cm

Astacus astacus European crayfish/Flodkräfta





Identification

• Dark to reddish brown or beige crayfish.

Potential misidentifications

• The signal crayfish (Arthropod nr. 37) looks similar, but with light marks at the claw joints and larger claws.

Habitat

- Freshwater.
- In both running and still water.



App. 20 cm



Arthropoda

Malacostraca

Decapoda

Astacidae

Paguridae Hermit crabs/Eremitkräftor



Identification

- Soft and twisted posterior end of body without hard exoskeleton.
- Uses empty shell or similar as protection of soft body.
- Differently sized claws, the right one usually larger.

Potential misidentifications

• No similar species in Sweden.

Habitat

- Marine
- Hard and soft bottoms



Cephalothorax length Up to 35 mm

Arthropoda

Malacostraca

Decapoda

Paguridae (8 Swedish species)

Polybiidae Swimmer Crabs/Simkrabbor





Identification

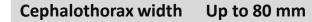
- Body shape crablike.
- End of fifth leg pair paddle-shaped.
- Carapace wider than long.

Potential misidentifications

• May look like other crabs but no other crabs has the paddle shaped fifth pair of legs.

Habitat

- Marine.
- Intertidal to around 100 m depth.
- Soft and hard bottoms.





Arthropoda

Malacostraca

Decapoda

Hyas sp. Hyas/Hyas





Identification

- Body shape crablike.
- Carapace pear shaped.
- Carapace has bumps but no spines.
- Relatively long legs.
- No similar species in Sweden.

Potential misidentifications

• Carapace looks like Inachidae (Arhtropod nr. 42) but *Hyas* is larger and with much shorter legs.

Habitat

- Marine.
- All bottom types.
- 1-500 m depth.

Cephalothorax widthUp to 90 mmCephalothorax lengthUp to 115 mm



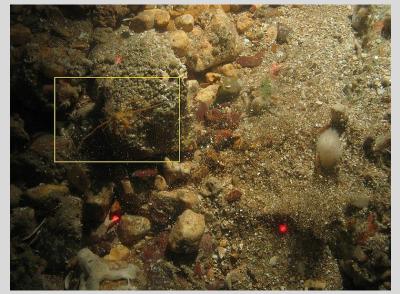
Arthropoda

Malacostraca

Decapoda

Oregoniidae

Inachidae Inachidae/Spindelkrabbor







Identification

- Body shape crablike.
- Carapace +/- pear shaped.
- Thin, very long legs.
- Relatively slender claws.
- Often covered by attached algae or animals.

Potential misidentifications

• Carapace looks like *Hyas* (Arhtropod nr. 41) but *Hyas* is larger and with much shorter legs.

Habitat

- Marine.
- All bottom types.
- 1-200 m depth.

Cephalothorax length Up to 30 mm



Arthropoda

Malacostraca

Decapoda

Inachidae (5 Swedish species)

Cancer pagurus Edible crab/Krabbtaska



Identification

- Body shape crablike.
- Carapace ("shell") is brown-red dorsally and yellowwhite ventrally.
- Carapace is wider than long (>3/2).

Potential misidentifications

• No similar species in Sweden.

Habitat

- Marine.
- Hard bottoms, soft bottoms.
- Down to 50 m depth.





Arthropoda

Malacostraca

Decapoda

Cancridae

Cancer pagurus

LC

Carcinus maenas Green shore crab/Strandkrabba





Identification

- Body shape crablike.
- Carapace greenish or brownish with darker markings.
- Carapace somewhat "triangular"
- Moderate sized claws.

Potential misidentifications

Can be mistaken for two rarer species. Atelecyclus rotundatus has rounder carapace and larger claws. Pirimela denticulata has smaller claws and is much smaller (carapace length <15 mm).

Habitat

- Marine.
- Soft and hard bottoms.
- From shallow waters down to 200 m.

Cephalothorax widthUp to 80 mmCephalothorax lengthUp to 60 mm



Arthropoda

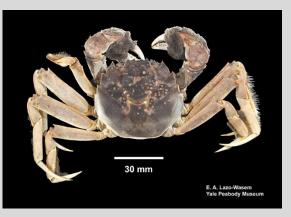
Malacostraca

Decapoda

Carcinidae

Eriocheir sinensis Chinese mitten crab/Kinesisk ullhandskrabba







Identification

- Body shape crablike.
- Claws covered in fine brown hairs.
- Carapace almost round, somewhat longer than wide.

Potential misidentifications

 Can be mistaken for *Hemigrapsus* (Arthropod nr. 46) but *Hemigrapsus* has a more square carapace, lacks hair on claws is never seen in freshwater and is smaller.

Habitat

- Freshwater and brackish water.
- Reproduces in marine environment.
- Introduced and invasive.

Cephalothorax length 60 – 70 mm



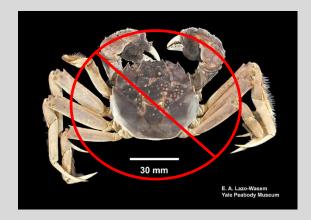
Arthropoda

Decapoda

Varunidae

Hemigrapsus sp. *Hemigrapsus/Hemigrapsus*





Identification

- Carapace somewhat squarish.
- Carapace usually somewhat wider than long.
- Ridges on carapace forms an H-shape.

Potential misidentifications

 Can be mistaken for Chinese mitten crab (Arthropod nr. 45) but that species has hairy claws, has a rounder carapace and is never seen in truly marine environments.

Habitat

- Brackish and marine water.
- Intertidal to 15 m depth.
- Introduced and invasive.

Cephalothorax length Up to 40 mm



Arthropoda

Malacostraca

Decapoda

Varunidae

Sources

Species selected and text written by Christina Jönander, Oskar Gran and Søren Faurby.

Species characteristics are mainly based on Fältfauna Kräftdjur (Pehr H. Enckell, Signum, Lund, 1980), Fältnyckeln Mångfotingar (Artdatabanken, SLU, Uppsala, 2006) and artfakta.se

Distributional maps for all taxa taken from artfakta.se

All pictures are from Wikimedia commons.