

Asterionellopsis

The elongated cells are thicker at one end. They stick together by the thicker ends to form colonies of various shapes. Usually a star shaped colony.

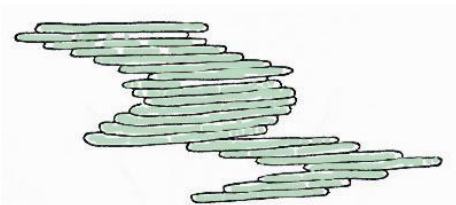
Size: individual cells are ~65um length



Odontella (Biddulphia)

The cells often occur singly or in twos/ threes. Sometimes longer chains are formed. The ends of cells have one or two projections. Cells are often triangular in end view. They have large numerous chloroplasts. Several species are known to flourish around the British Isles.

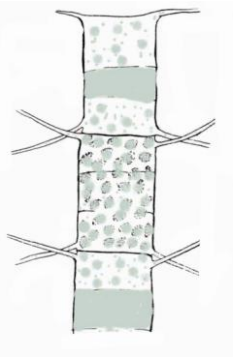
Size: individual cells range from 65um – 400um in length



Bacillaria

Long, thin cells which stick together to form colonies of various sizes and look like a pile of matches. If seen alive, the cells slide over one another to propel themselves forward.

Size: individual cells are 100 -250 um length



Chaetoceros

Cells are usually oval in cross section and have flat ends. A pair of long thin spines is found at the end of each cell and these fuse to form a chain with the neighbouring cell.

Chloroplasts are visible in the cells. Several species around the British Isles

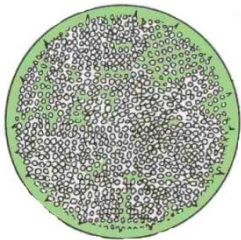
Size: individual cells are 20-70um length



Coccolithophore

Cells a circular/ ball shaped. Very distinctive calcium coccoliths on the surface of the cell. Blooms in huge numbers around the British Isles – turning the sea a milky white.

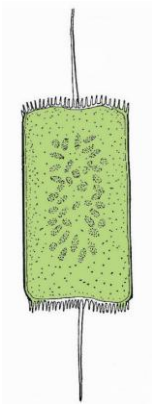
Size: individual cells are 30- 50 um diameter



Coscinodiscus

Very large singular cell. Simple disc shaped with pit like holes in the surface . Packed with chloroplast. Very common around the British Isles.

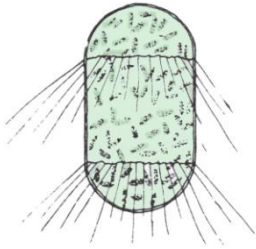
Size: individual cells 200- 500 um in diameter



Ditylum

Cells are elongated and each end there is single a spine which can join the cells to make a chain. Numerous chloroplasts. Common around the British Isles

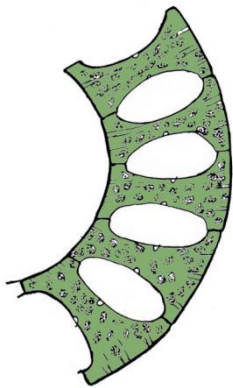
Size: individual cells are 25-60um in length



Corethron

Cells with rounded ends and numerous spines some of which serve to join up the cells. May small chloroplasts

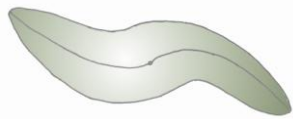
Size: individual cells are 15-40um in length



Eucampia

Large cells concave at each end. They join together to form a very characteristic spiral chain. Large numerous chloroplasts.

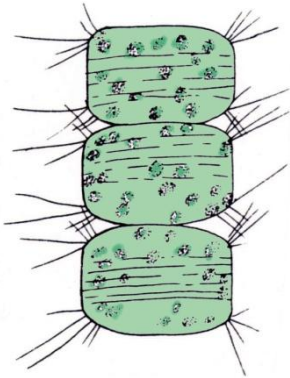
Size: individual cells are 25- 75 in diameter



Gyrosigma/ Pleurosigma

Usually a benthic phytoplankton. Individual cells have a curved s shaped to them and are never seen in chains.

Size: individual cells are ~ 100 um in length

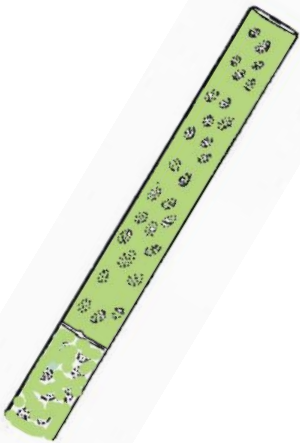


Lauderia

Short cylindrical cells united in straight chains with very little space between the cells.

Can be spiny and have numerous chloroplasts. Commonly seen around the British Isles

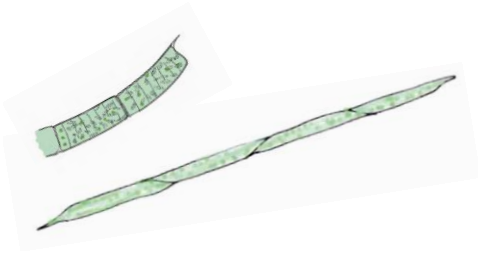
Size: individual cells are 40um in diameter



Leptocylindricus

Long cylindrical cells united to form straight thin chains. Occurs throughout the Channel and North Sea

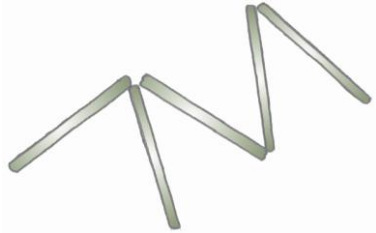
Size: individual cells are 6-12um in diameter



Rhizosolenia

Long, parallel sided cells with an asymmetrical point at each end which can be elongated or blunt. Numerous chloroplasts. Chains of cells are common. Many species are common around the British Isles.

Size: individual cells are 10- 30 μm in diameter



Thalassionema

Elongated rod like cells united to form a zig zag or star shaped colony. Numerous chloroplasts. Common around the British Isles

Size: individual cells are 40 μm in length

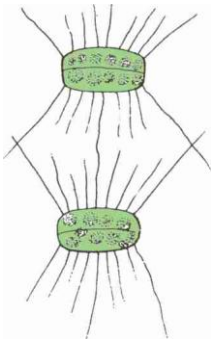


Nitzschia

Spindle shaped cells with a long spine at each end. Not usually seen in chains.

Commonly seen around the British Isles

Size: individual cells are 50 μm in length



Thallasiosira

The cells are similar to *Coscinodiscus* but much smaller. They usually have a spine on each of the cell which is used to join up with the neighbouring cell. Very common around the British Isles and the Atlantic

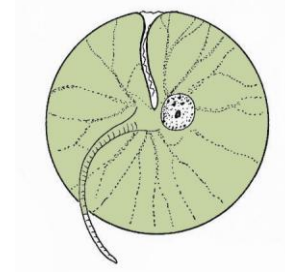
Size: individual cells are 10- 40 μm in diameter

Dinoflagellates

Noctiluca

A large gelatinous sphere with a rudimentary flagellum and a short tentacle. No chloroplasts as it is entirely holozoic. Can occur in vast numbers. Bioluminescent at night.

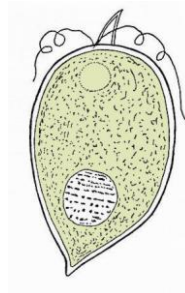
Cell size: ~1mm in diameter



Procentrum

Rounded cell with a distinctive spine at one end.

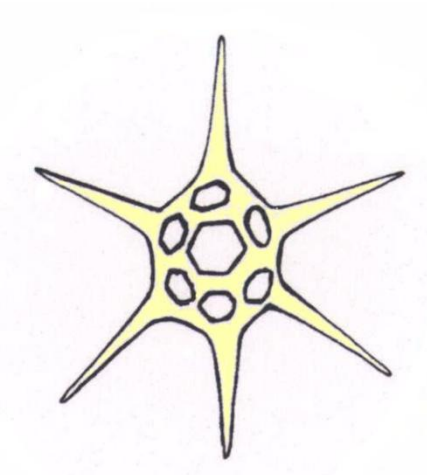
Cell size: ?



Silicoflagellates

A small skeletal looking star. The organism is made of silica spines and is very common.

Cell size: ?



Gonyaulax

A pear shaped flagellate with a distinctive 'wait band' that does not meet in the middle. Usually plated out surface with two small spines on the bottom. Some species can cause toxic blooms

Cell size: ?



Dinophysis

Rounded jug shaped flagellate. Has a distinctive frilly top and flagella at the side of the cell. Several species are found around the British Isles.

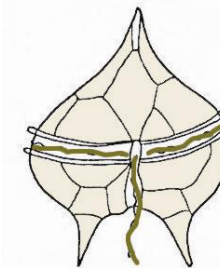
Cell size: ?



Peridinium

A round dumpy flagellate with a distinctive 'waist band' that does not meet in the middle. Two large clear spines on the bottom and a pointed apical horn

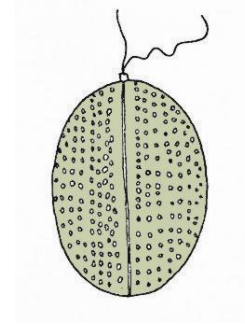
Cell size: ?



Exuviella

An oval flagellate with two distinctive halves. Small and often missed but very common around the British Isles.

Cell size: ?



Ceratium

Tri horned large flagellates. They have an obvious girdle and a thin flagella. There are several species in the North Atlantic and around the British Isles.

Cell size: ?

