



Brown foam on the beach

What is it?

The brown foam seen on our beaches from time to time is surf algae, also known locally as surf scum.

Surf algae are always present in the surf-zone but sometimes there is a population explosion. This is when large amounts of unsightly brown foam makes a nuisance of itself in the surf and on the beach.

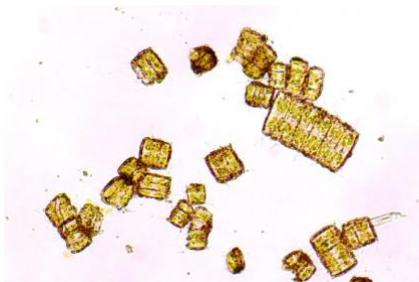
It can easily be mistaken for some kind of pollution event, but it isn't.

What are surf algae?

Samples of brown foam have been checked and the most common species along our coast are called *Gonioceros* and *Asterionellopsis*.

Surf algae are simple, microscopic plants. They just need nutrients and sunlight to grow. They attach to bubbles in the surf so they float near the surface where there is plenty of sunlight for growth. The brown foam is a collection of millions of these algae filled bubbles.

Horizons Regional Council monitoring and reports from the public tell us the worst blooms usually occur in spring.



Gonioceros sp (250x)



Brown foam/scum washup

Are they harmful?

- Surf algae identified from west coast beaches are not known to produce toxins. In fact there is research saying that surf algae are a source of food for shellfish such as tuatua and toheroa.
- Surf algae should not be confused with a toxin producing alga that is occasionally found along some parts of the New Zealand coastline. That alga makes shellfish unsafe to eat. Monitoring is done by Ministry of Primary Industries and there is publicity, including signage at beaches, if there is a problem. Information about this can be found on the MPI website <https://www.mpi.govt.nz/dmsdocument/1058-Food-safety-for-seafood-gatherers>

What causes blooms?

Surf algae blooms are caused by a combination of many things in the surf-zone environment. One of these is likely to be nutrients from major river inputs along the west coast.

Council's management of freshwater quality in catchments draining into west coast beaches should help reduce the frequency of blooms in the long-term.