

Biotoxin report:

PSP toxins: No samples were analysed this week.

DSP toxins: No samples were analysed this week.

ASP toxins: No samples were analysed this week.

AZA toxins: No samples were analysed this week.

YTX toxins: No samples were analysed this week.

Harmful algae report:

Alexandrium: No samples were analysed this week.

Pseudo-nitzschia delicatissima: No samples were analysed this week.

Pseudo-nitzschia seriata: No samples were analysed this week.

Dinophysis: No samples were analysed this week.

Prorocentrum lima: No samples were analysed this week.

Karenia mikimotoi: No samples were analysed this week.

Shetland: trends and forecast

Alexandrium/PSP: Given the time of year, it is extremely unlikely there will be a toxic bloom this week.

Dinophysis/DSP: Given the time of year, it is unlikely there will be a toxic bloom this week.

Pseudo-nitzschia/ASP: Given the time of year, it is extremely unlikely that there will be a toxic bloom this week.

AZA and YTX: It is extremely unlikely that there will be a toxic bloom this week.

Risk for **PSP:** Low

Risk for **DSP:** Low

Risk for **ASP:** Low

Risk for **YTX:** Low

Risk for **AZA:** Low

While this bulletin is based on our expert opinion, SAMS cannot accept responsibility for harvesting or husbandry decisions. Those remain the responsibility of the industry.



Toxin concentrations provided courtesy of the Centre for Environment, Fisheries and Aquaculture Science



Funding for these bulletins is kindly provided by Seafood Shetland

Primary data for biotoxins and biotoxin producing phytoplankton available at: <http://www.food.gov.uk/enforcement/monitoring/shellfish/algatoin/#.UY0TkqTQ6O>

Warning/Threshold Levels

<i>Alexandrium</i> (PSP causative)	Warning 20 cells/l Threshold 40 cells/l
<i>Pseudo nitzschia</i> (ASP causative)	Warning: 40,000 cells/l Threshold: 50,000 cells/l
<i>Dinophysis</i> (DSP causative)	Warning : 80 cells/l Threshold:100 cells/l
<i>Prorocentrum lima</i> (DSP causative)	Warning: 80 cells/l Threshold: 100 cells/l

The maximum permitted levels of biotoxins in shellfish are:

PSP: 800 µg/kg

ASP: 20 mg/kg

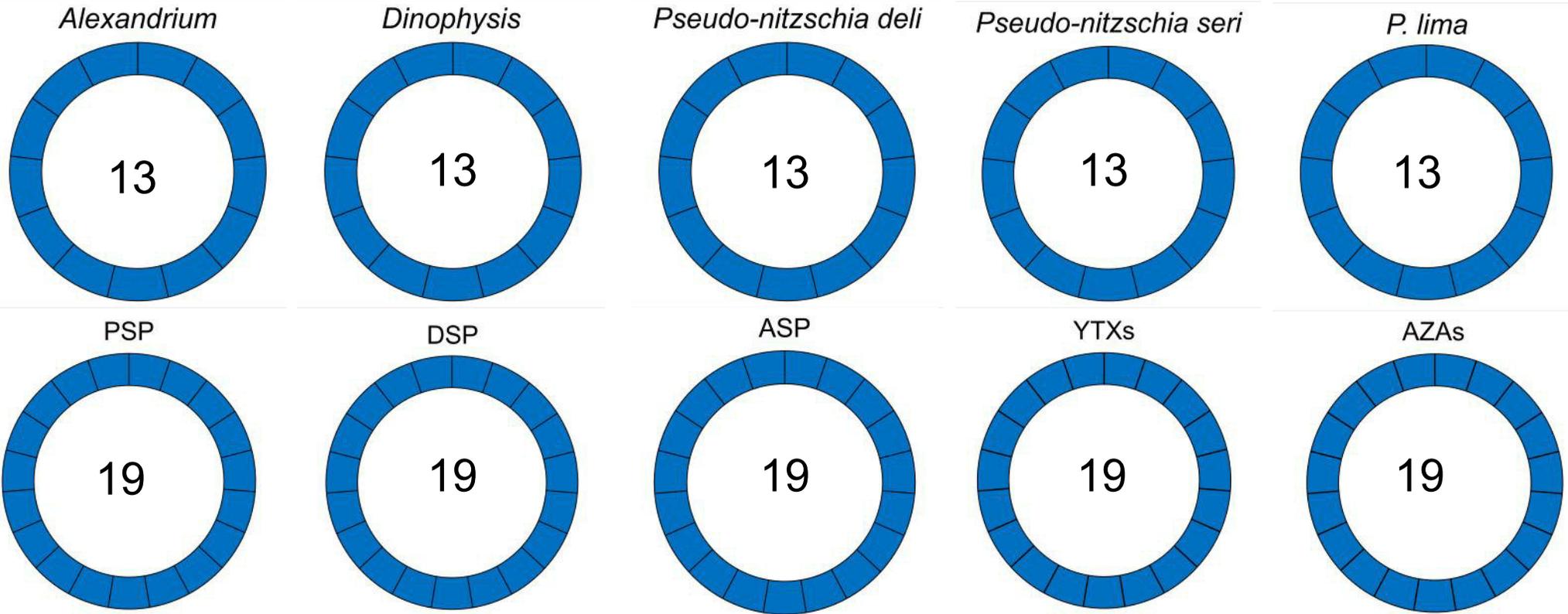
Lipophilic toxins (tested by LC-MS):

OA/DTXs/PTXs: 160 µg/kg of Okadaic acid equivalents

YTXs: 3.75 milligram of yessotoxin equivalent/kilogram

AZAs: 160 micrograms of azaspiracids equivalents/kilogram

Status of biotoxins & harmful algae present in Shetland



Segments - no of individual sites, Colours: Green, red, amber and yellow as per key. Blue - not analysed. Coloured segment indicates approximate position of site in Shetland

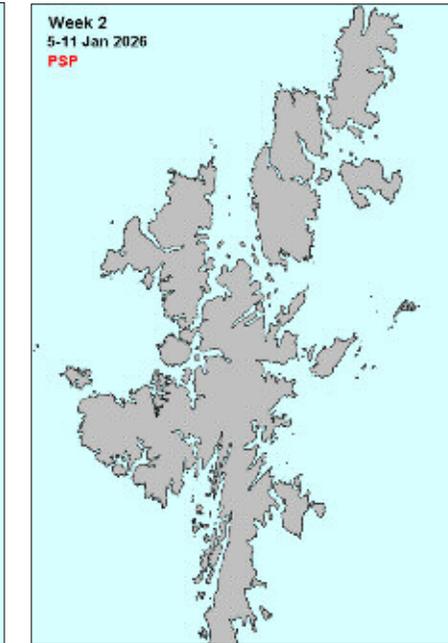
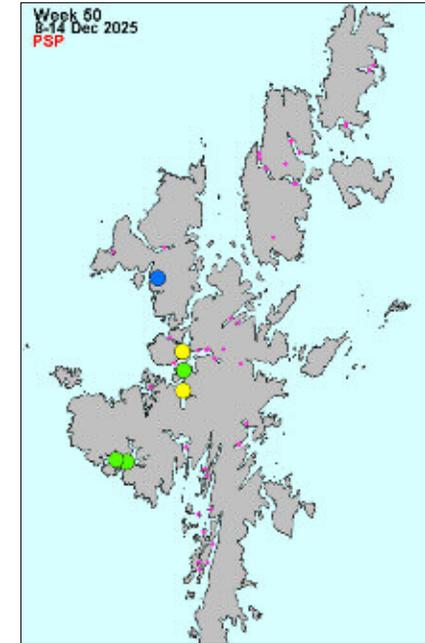
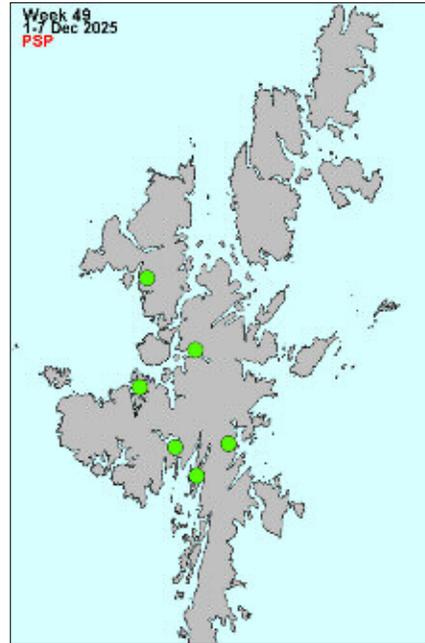
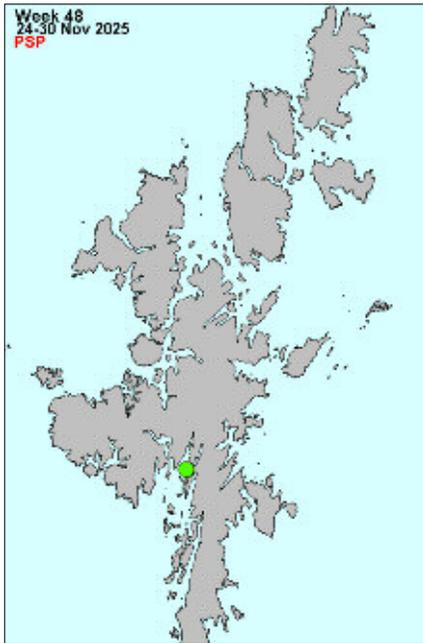
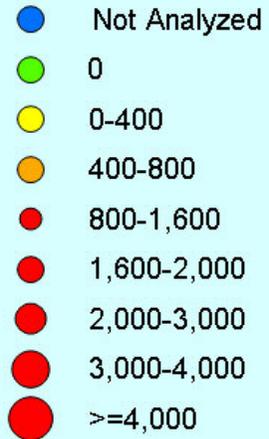
Biotoxin & Species	Green	Yellow	Amber	Red	Blue
PSP	<RL	RL - 399 µg/kg	400 - 800 µg/kg	>800 µg/kg	Not analysed
OA/DTX/PTX	<RL	1 - 79 µg/kg	80 - 160 µg/kg	>160 µg/kg	Not analysed
ASP	<LOQ	LOQ - 9.9 mg/kg	10 - 20 mg/kg	>20 mg/kg	Not analysed
YTX	<RL	1 - 1.7 mg/kg	1.8 - 3.75 mg/kg	>3.75 mg/kg	Not analysed
AZA	<RL	1 - 79 µg/kg	80 - 160 µg/kg	>160 µg/kg	Not analysed
<i>Alexandrium</i>	<20 cells/l	n/a	20 cells/l	≥ 40 cells/l	Not sampled
<i>Dinophysis</i>	<20 cells/l	20 - 79 cells/l	80 - 99 cells/l	≥100 cells/l	Not sampled
<i>Pseudo nitzschia</i>	<20 cells/l	20 - 39,999 cells/l	40,000 - 49,999 cells/l	≥50,000 cells/l	Not sampled
<i>Prorocentrum lima</i>	<20 cells/l	20 - 79 cells/l	80 - 99 cells/l	≥100 cells/l	Not sampled

NOTE:
 This page is intended as a quick overview of the situation in the Shetland Islands. If the status for a particular species or biotoxin is amber or red please check the relevant pages in the bulletin for more details and specific locations.
 RL- reporting limit;
 LOQ – Limit of quantification

Paralytic shellfish poisoning toxins & causative phytoplankton

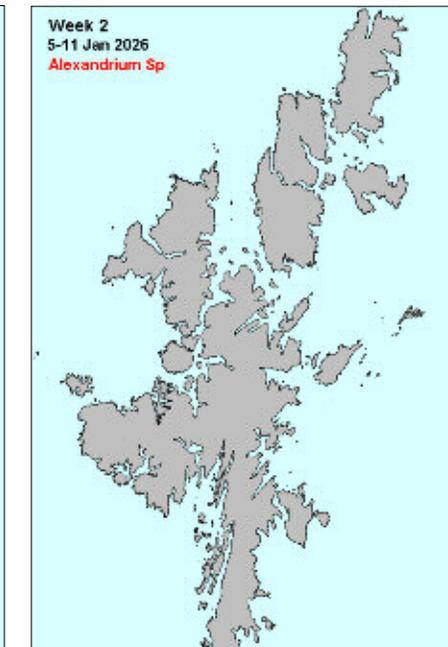
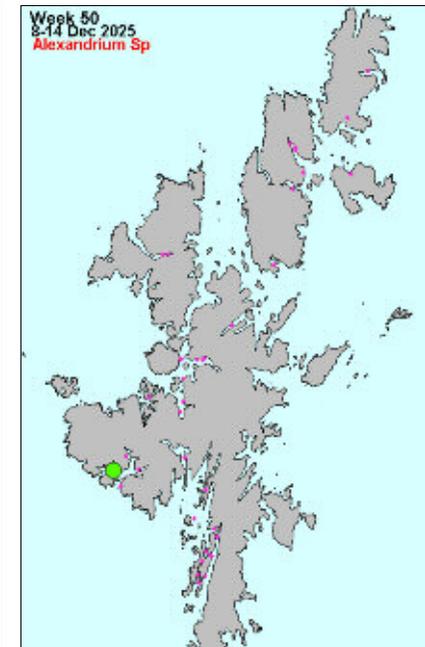
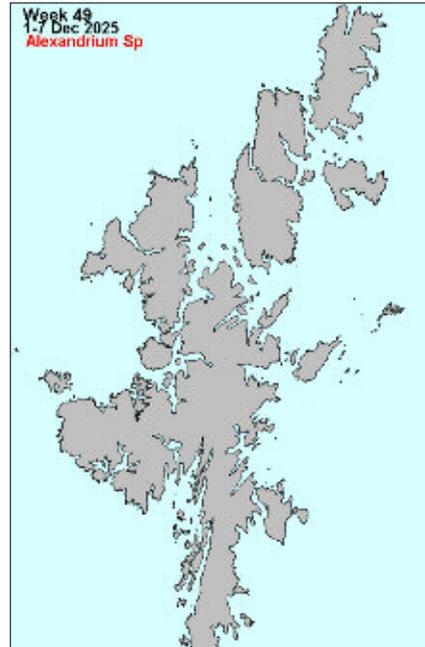
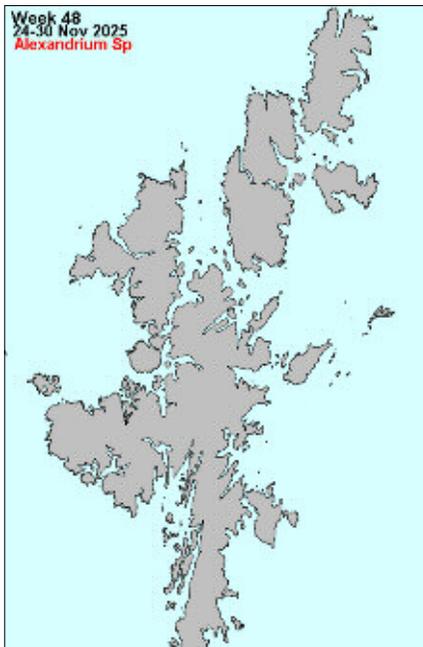
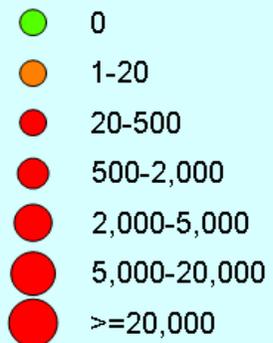
PSP

µg STX eq/kg



Alexandrium Sp.

cells/l

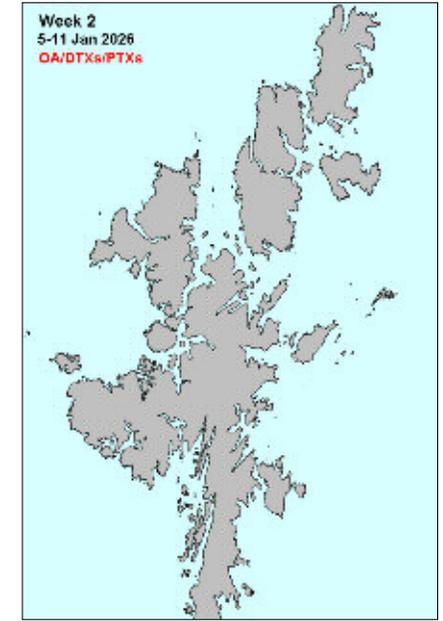
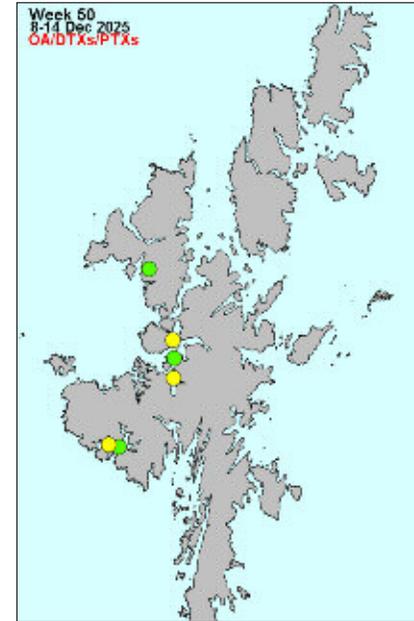
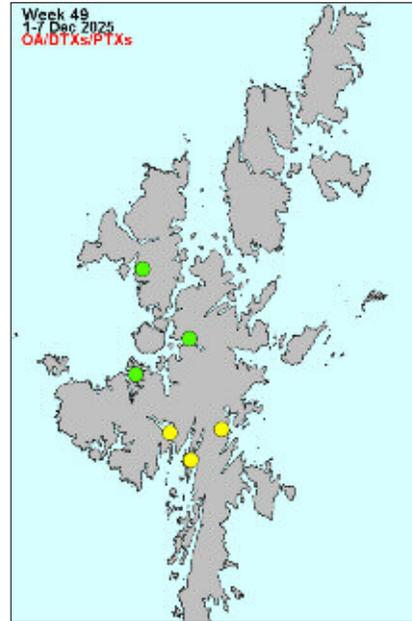
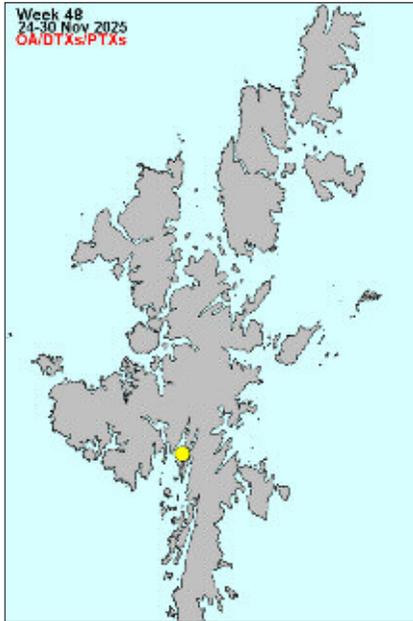


Diarrhetic shellfish poisoning toxins & causative phytoplankton

OA/DTXs/PTXs

µg OA eq/kg

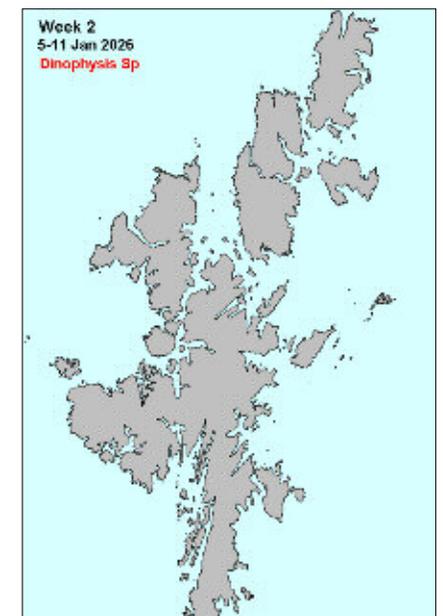
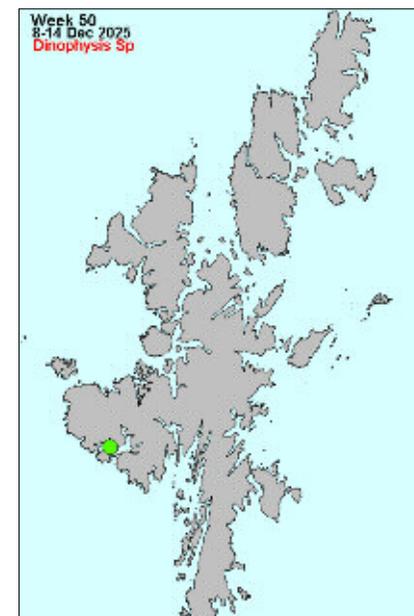
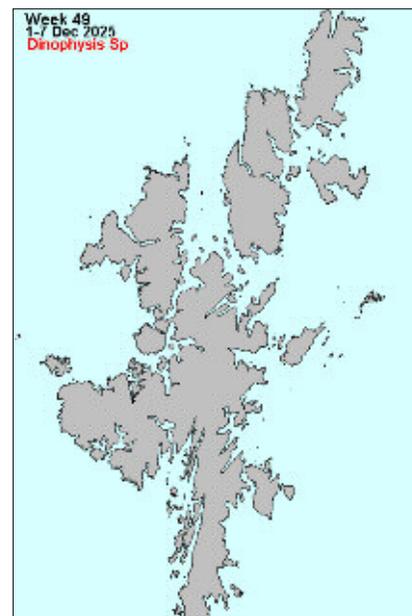
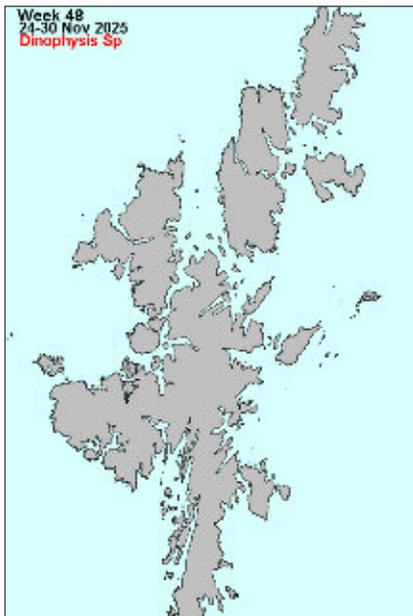
- Not Analyzed
- 0
- 0-80
- 80-160
- 160-500
- 500-1,000
- 1,000-2,000
- 2,000-5,000
- >=5,000



Dinophysis Sp.

cells/l

- 0
- 0-80
- 80-100
- 100-400
- 400-1,000
- 1,000-2,000
- 2,000-5,000
- >=5,000



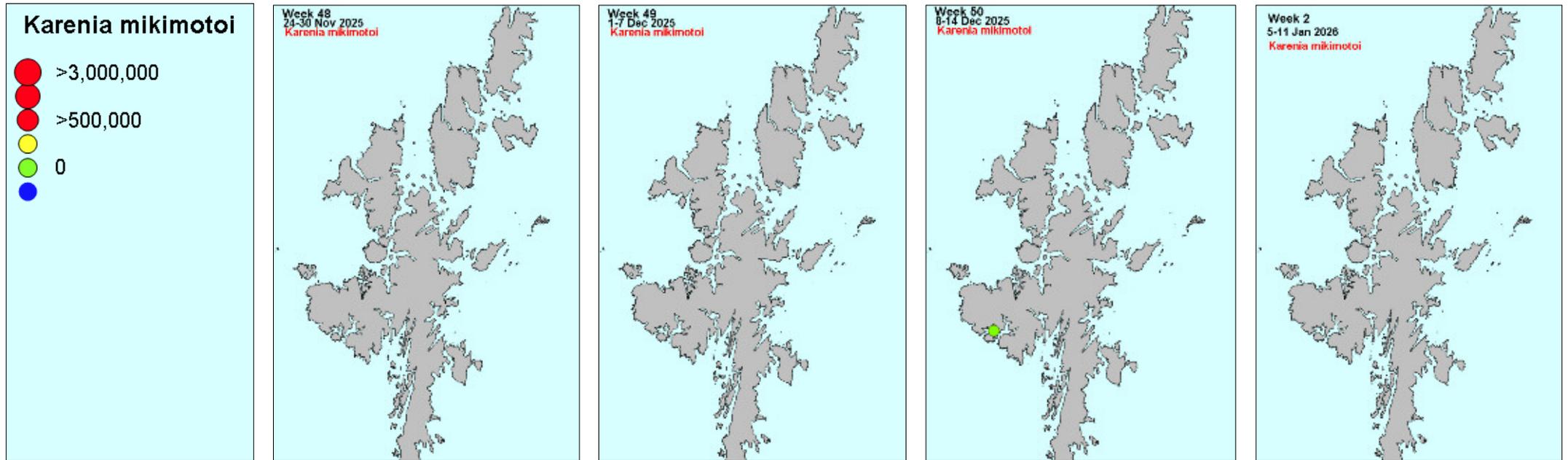
Amnesic Shellfish Poisoning & causative phytoplankton



Azaspiracid & Yessotoxin shellfish poisoning toxins



Karenia mikimotoi



Chain forming Phytoplankton

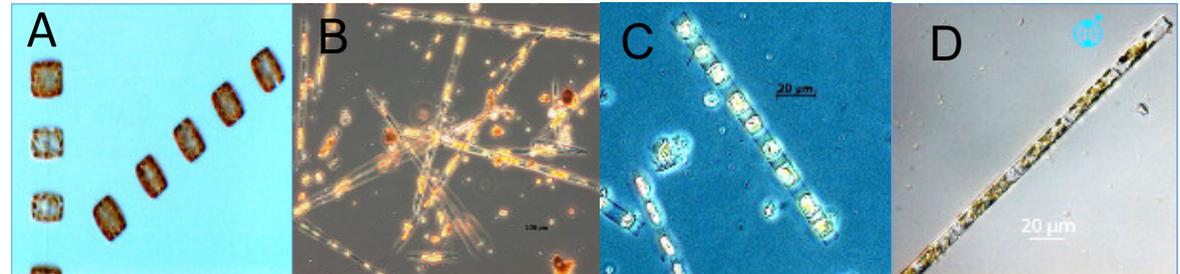
High densities of chain forming diatoms including, but not limited to the genus, *Chaetoceros*, *Skeletonema*, *Leptocylindrus*, *Rhizosolenia*, *Thalassiosira*, *Corethron* and *Pseudo-nitzschia*, the centric species *Coscinodiscus wailesii*, and species with long spines such as *Ceratium* (*Tripos*) can cause debilitating damage to fish gills.

Status

No samples were analysed this week.

The IFCB at Cole Deep is mainly detecting small flagellates.

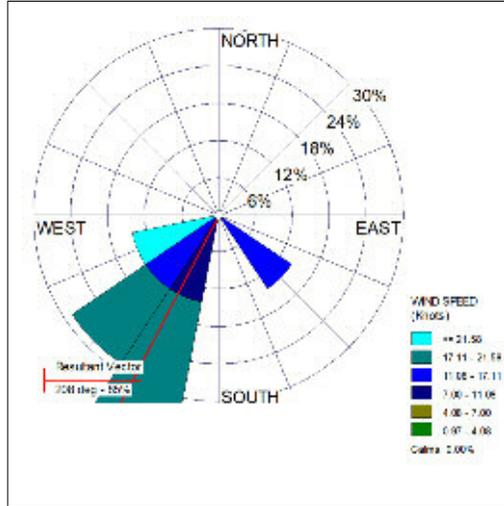
<https://www.habreports.org/ifcb-nafc.php>



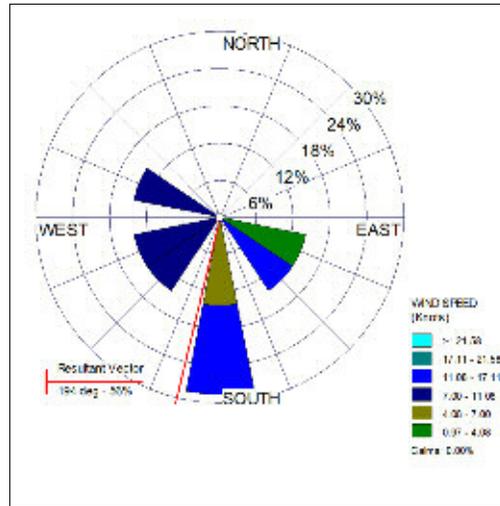
A - *Thalassiosira* sp.
 B - *Pseudo-nitzschia* sp.
 C - *Skeletonema* sp.
 D - *Leptocylindrus* sp.
 E - *Chaetoceros* sp.
 F - *Ceratium/Tripos* sp.

Mean wind direction observed in Shetland for current and three preceding weeks

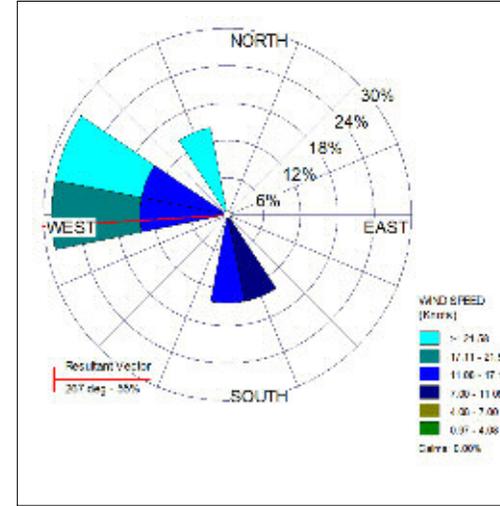
Week 51



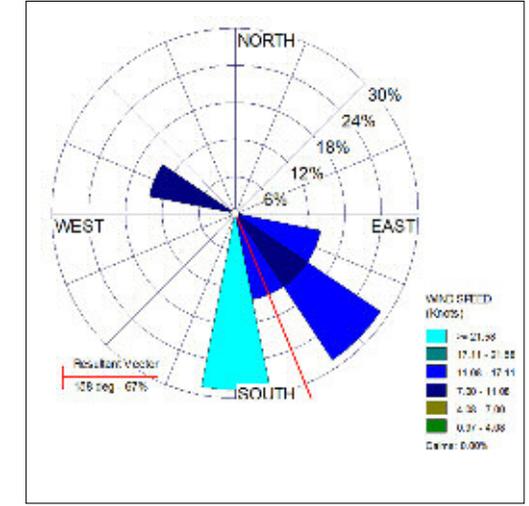
Week 52



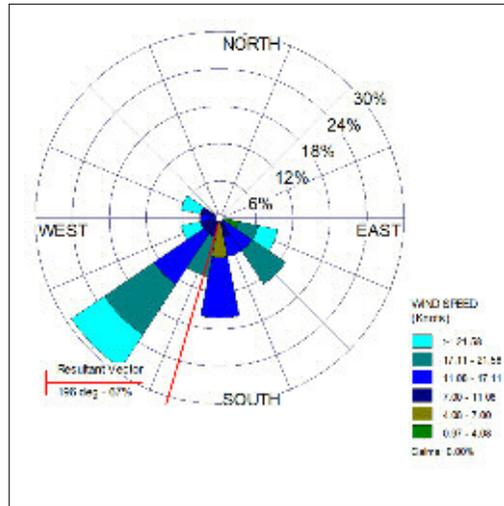
Week 1



Week 2



December



Mean wind direction and speed observed in Shetland over the past four weeks. Higher wind speeds are shown in lighter shades. The percentage of time the wind blew from any particular direction is shown by the length of the triangle. The resultant vector, represented by the red or blue line, shows the average wind direction for the week. It is based on wind direction only and includes periods of calm which are not indicated on the diagram. The data used is taken from the weather station at Sumburgh.

Status:

Over the past week the average wind direction has been from the south south east.

Predictions:

The risk of wind blown *Dinophysis* blooms in Shetland is **low** this week due to the winds blowing in from a southerly direction.

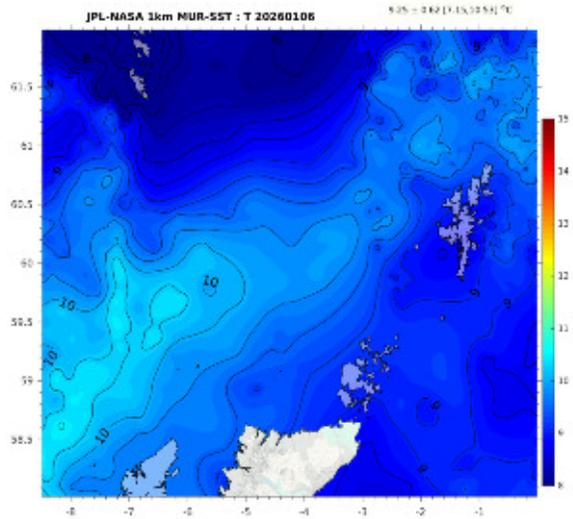
Why do we think this?

During the summer *Dinophysis* can bloom out at sea and at shelf fronts found off the West of Shetland. Westerly winds can then blow these blooms into shore. Westerly winds may also retain *Dinophysis* cells in Westerly facing voes and inlets where their numbers may increase. Wind for the past week has been predominantly from the south south east. It is unlikely that there will be an advected bloom of *Dinophysis* in the coming week.

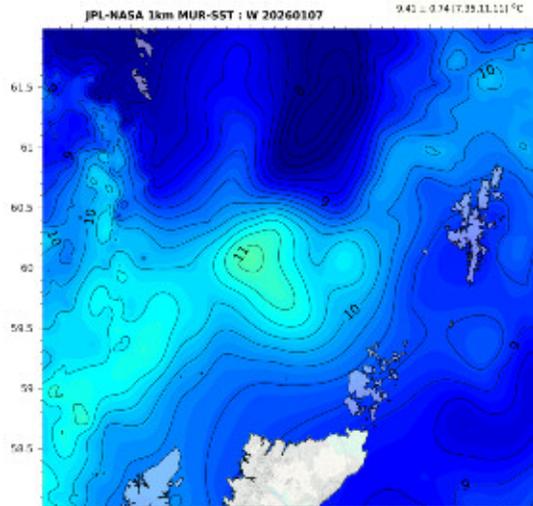
Shetland Bulletin on the status of harmful & toxic algae Week 2, 5th - 11th Jan 2026

Sea Surface temperature (°C) in preceding 6 days in the Shetland Islands

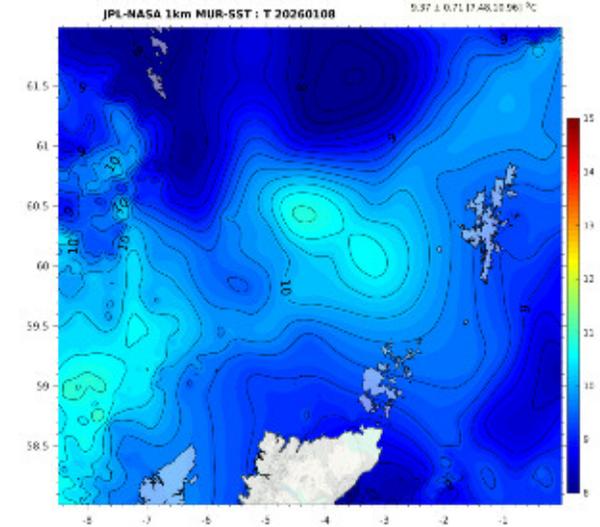
6 Jan 2026



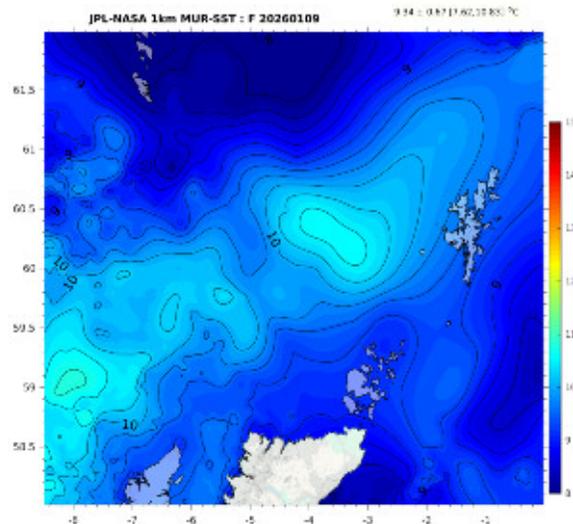
7 Jan 2026



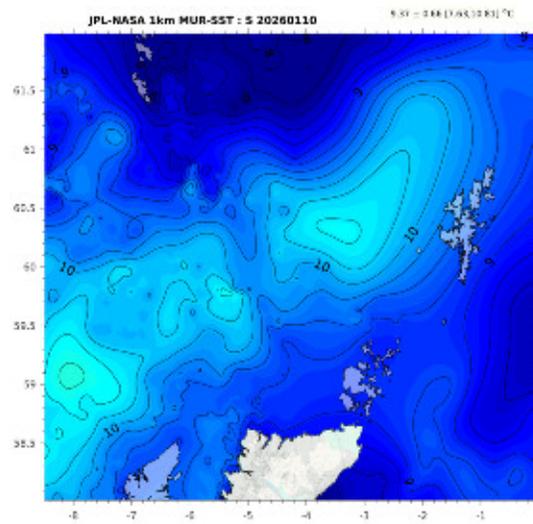
8 Jan 2026



9 Jan 2026



10 Jan 2026



11 Jan 2026

