



### Ifremer

Ifremer is the French Institution for Sea Exploitation & Research. It is an 'epic' company, a public company. We are particularly tasked by the government to survey the coast, but we also do independent research which is paid for by private companies - commercial studies. There are about 1,7000 people working both in France and in French dependencies around the world

The Bay of St Brieuc falls under Dinard for everything to do with the environment, but everything to do with fishing is under Brest.

The Bay of St Brieuc is one of the largest on the Breton coast, with the Bay of Mont St Michel, it is very important for shell fish, especially coquilles St Jacques. It is also a bay known for its environmental troubles and this is specifically what we deal with in our laboratory.

The laboratory in Dinard deals with water quality and we work in partnership, dealing with flora and fauna, for the nature reserve in St Brieuc.

In Dinard there are ten people. We are not many and we survey the entire coast from Mont St Michel to St Michel de Greve.

It is a huge area but that isn't our only job. Surveying is an activity which takes a lot of time and it is very expensive, so we have to work hard and the Bay of St Brieuc is a really big problem.

Firstly for the proliferation of green algae, and what is less known is that it is a bay which doesn't have very good water quality. The problem of green algae is not a recent one; it began in the 70's so it has existed 40 years. The biggest point was in the 80's. It comes from nitrogen. It comes from agriculture, but also, in the Bay of St Brieuc it comes from urban activities, due to the number of towns around the coast.

The work of Ifremer is to demonstrate what is happening, but if you want to find a solution, that is not our work. We know how to reduce the amount of nitrogen from urban areas, it is a technical problem. It is very expensive, but we know how to do it. With agriculture it is more complicated, because it covers a larger area than the towns on the coast. It is a financial problem. We need to talk to farmers about what they have and have not to do. It takes a long time.

Green tides, are not very bad for shellfish, they are a nuisance for people. Some people have health concerns but that is a recent issue.

It is not bad for Coquilles St Jacques, and mussels and cockles are not

impacted. The sole impact of green algae is that it stops the growth of phytoplankton.

You can eat shellfish without any problem; they are checked for toxins and microbes. When there is a health problem with shell fish it comes from other toxic algae. The Bay of St Brieuc has problems, but not of toxic algae.

It is very difficult to think about the future because there are many scenarios. The first one is to reduce green algae because it is a big nuisance and there are public health concerns, which could become more important in the future. The biggest problem is an increase in the population. If this isn't tackled now problems will increase in the future. It is a very urgent issue that needs to be thought about.

It is not a question of being optimistic or pessimistic. No one is able to say what the future will be because we don't know what might happen, how many people might here come to live.

