

Email from Martin Sanford to Miles Irving - 6th July 2015

Hi Miles

For a more up-to-date overview of the status and biology of Sea Kale I recommend The Biological Flora account which is available [online](#).

This suggests that reproduction in the wild is mainly by seed although root cuttings are capable of reaching flowering size faster than from seed. I note that David Pearman says that the storms aid spread by both breaking up fragments and spreading seed. It would be a time-consuming job to set up long-term experiments that could prove which reproductive method was the most effective. As the corky seeds are capable of germinating after quite long periods in sea water it seems likely they are important in long distance dispersal, probably more so than the root fragments.

There are a few hints that climate change is influencing the spread of Kale, not only through increased frequency of storms but also by reducing winter damage from frosts and waterlogging.

I can confirm that the population on the Suffolk coast has greatly increased in the last 20-30 years, most of this is in areas that are not eroding. I wish I could say more about the factors influencing this change, but it would be conjecture with little hard evidence to back it up. Although it has been suggested that collecting (of both leaves and whole plants) may have influenced population levels, I have not seen any hard evidence to support this view.

Martin Sanford