

Carex maritima update

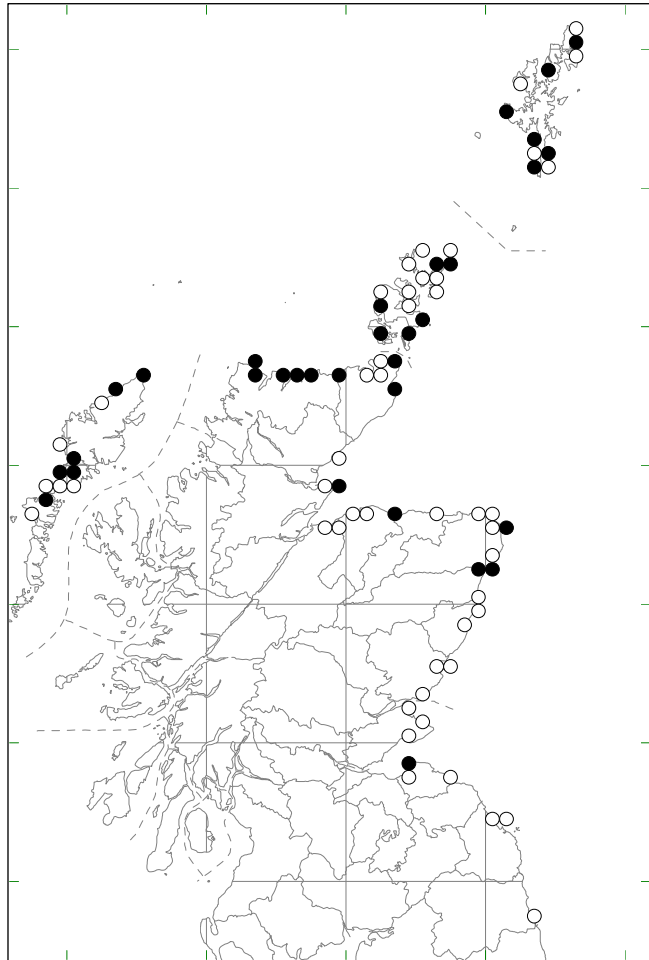
David Pearman (dpearman4@aol.com) & Alex Lockton (coordinator@bsbi.org.uk)

Since last year there have been a few more discoveries. Tom Dargie and, independently, Ian Green, found thousands of plants at Menie Links, north of Aberdeen (NJ9921). This site has been fiercely fought over during the last year as it is the target of a property development proposal. Meanwhile, in the adjacent hectad, NK02, David Welch refound a small population of just 26 plants at Hackley Bay. These finds make it seem worthwhile searching the east coast more carefully. Meanwhile, Mark Spencer kindly sent details of the specimens at the Natural History Museum (BM), which added several old sites to the database. There are now 32 post-2000 and 48 pre-2000 dots on the map.

We are fairly confident now that the recently known but apparently lost populations really have disappeared. Most of them were declining anyway, due to changes in habitat – usually natural succession. A proportion of recently lost sites were in very atypical habitat, though, such as airfields, pasture and golf courses. It seems quite possible that these were in fact anthropogenic populations, created when sand containing seeds of this species was spread over bare ground. The *C. maritima* may have flourished for a few years but was doomed from the start.

So the challenge now is to find entirely new populations. This is the holy grail for botanists – to find new sites for rare species. There's no scientific method for this: we just have to look at every sandy beach, focusing effort on the margins of streams and dune slacks. It is also worth looking in the vicinity of old sites, as we believe it is a species with long-lived seeds, adapted to reappear when favourable conditions return.

One question about *C. maritima* that is currently unanswerable is why it does not occur on the west coast of mainland Scotland. The dots on the west coast of England have recently been removed from the maps, as they were found to have been erroneous. What could be so very different about the west coast? There are plenty of sandy beaches and dune systems, so on the face of it there should be suitable habitat. One possibility might be ocean currents, but it is not obvious how this could be having an effect. A more likely one could be isostatic rebound, as the sea generally retreats from the west coast, possibly leaving *C. maritima* populations high and dry. Is it conceivable that this could, over long periods of time, be sufficient to eradicate the species? Observations on whether thriving populations are found on accreting or eroding dunes might help answer this question. Are there any other species that exhibit a similar distribution?



The hectad distribution of *C. maritima*, showing post-2000 records as black dots.