

Response to Royal Haskoning's report (Reference:PB5312-RHD-ZZ-XX-RP-Z-0001) on the proposed Spur Point (Long Hougue South) development in terms of the Scaly Cricket population.

**Professor Karim Vahed, University of Derby, Kedleston Road, Derby DE22 1GB, U.K.
E-mail: K.vahed@derby.ac.uk**

The Scaly cricket, or Atlantic Beach cricket, *Pseudomogoplistes vicentae* is considered by the International Union for the Conservation of Nature (IUCN) to be threatened by extinction and is in the 'Vulnerable' category (Hochkirch et al. 2016a,b). The species is a strict specialist of shingle deposits on beaches and is known from a limited range of locations globally, including only 5 different populations in the British Isles (in Pembrokeshire, Devon, Dorset, Sark and Guernsey). Where the species does occur, the populations tend to be found within very restricted areas of suitable habitat- often the whole population occurs in only a couple of hundred metres of shoreline. Potential threats to the survival of populations include an increase in the frequency of severe weather events and rising sea levels associated with climate change, together with marine pollution events and coastal developments (Sutton 2015; Sutton et al. 2017; Hochkirch et al. 2016a,b).

The scaly cricket survey data show that the population at Spur point is the second highest density on the island (with 297 having been caught in 11 pitfall traps). This density suggests a very healthy population and is comparable with the main population in the UK at Chesil beach. This population is therefore an important site for this species, which is only known globally from a limited number of sites.

I visited the site myself in April 2019 and found both adult males and females that had overwintered (Vahed & Bourgaize 2020). To my knowledge this is the only site known where overwintered males have been found: they normally die off by the end of November Vahed (2019). This, together with the high population density, suggests that the sheltered location of the bay (being relatively protected from Atlantic storms) provides unusually favourable conditions for survival of individuals of this species. While the Royal Haskoning report concludes that the Spur Point area represents only 5% of suitable habitat on the island, this does not acknowledge the potential importance of the particular site in terms of the

sheltered location and high population density. Clearly, more than 5% of the population of scaly crickets on the island occurs on this site.

As the report points out, the proposed inert waste development at Spur Point will eliminate this population and its habitat completely. In terms of proposed mitigation measures, the report (section 18.7.32) states that ‘translocation of scaly crickets to a suitable alternative location where scaly crickets are present will allow population numbers to be retained’. I feel that this is unrealistically optimistic and potentially misleading. There seems little point in translocating individuals to a site where scaly crickets are already present. It would also be impossible to monitor the success of a translocation if scaly crickets were already present. Furthermore, it is not clear what safeguards, if any, would be put in place to protect the site of the translocation. To protect this vulnerable species, sites with suitable habitat are likely to be the key limiting factor, as opposed to the individuals themselves.

A further concern is that my own translocation experiment (based at a site near Branscombe Beach in Devon), in which I released 60 mid stage nymphs, was unsuccessful. No scaly crickets were captured in four subsequent surveys of the beach. There is therefore no evidence that translocation will work for this species. Another problem with the proposed translocation is that the species has a 2-year life cycle, with eggs remaining in drift wood/within the shingle for a whole year and independent ‘even’ and ‘odd’ year populations being present at the same site (Vahed 2019). Trapping of individuals at any one time of year will firstly only capture a very small fraction of the population and secondly are unlikely to capture both ‘even’ and ‘odd’ year generations.

References

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