

Consideration of potential impact of proposed roof-mounted wind turbines, CISM on the wader roost at Crymlyn Burrows SSSI

Swansea Bay is used by significant numbers of migrant and overwintering wading birds, feeding across the extensive intertidal sand and mud flats. At high tide these birds have to find a safe roost, and use a number of suitable sites around the coast of the Bay, including Crymlyn Burrows SSSI.

The main species found in the Crymlyn roost are Sanderling *Calidris alba*, Dunlin *Calidris alpina*, Ringed Plover *Charadrius hiaticula*, Oystercatcher *Haematopus ostralegus*, Curlew *Numenius arquata* and Redshank *Tringa tetanus*, with Sanderling regularly present in nationally significant numbers (>1% of the UK wintering population) and redshank occasionally breeding on the site.

There are also recent (2021, 2022?) records of the schedule 1 species Little Ringed Plover *Charadrius dubis* breeding on land approximately 1km to the west of the proposed turbines, but these have not been observed further east of this area and are not considered to be impacted by the proposed turbines.

It is considered unlikely that the proposed turbines would present a risk to the wader roost, either through noise disturbance or by birds flying into the turbines directly. Roosting waders can be found all along the beach at high tide and do move as a result of disturbance, weather, and tide height, but favoured locations are shown in figure 1 below. The shortest distance from roosting birds to the proposed turbines is around 350m and at 10cm above ground (the approximate height of a small wader) there would be no direct line of sight or sound to the turbines and it is unlikely that they would give any audible noise on the beach above the noise of the wind and waves, hence the conclusion that they would not cause disturbance to the roost.

The waders roosting on the beach at Crymlyn Burrows feed across the Bay and move up and down with the tide ie they follow the water's edge and don't regularly fly over the dunes or campus. When disturbed by walkers or predators they tend to fly over the sea to find a new roosting site further along the beach.

Birds can be killed by flying into windows, especially when lit at night, but despite significant areas of glazing at the Bay Campus I am not aware of a single wader being killed there since it opened in 2015, reinforcing my casual observation that they do not regularly fly over the campus at building height, and hence at direct risk of striking the turbines.

It is recommended that any dead birds (whether waders or other species) found when accessing the roof or turbines for routine maintenance be reported to myself and the records passed to the Crymlyn Burrows Management Committee as part of the routine Warden's Report, to identify any unforeseen issues and inform future decisions.

Ben Sampson

Biodiversity Officer, Swansea University / Warden Crymlyn Burrows SSSI



Figure 1: approximate location of proposed turbines and wader roost