Proposed Scallop Ranching area – informal seabed assessment

Dive survey carried out on 4 July 2007, 0932 to 1032hours – HW 4.7m @ 0922hrs.

Divers;
Nigel Mortimer
Phil Goodhead

Max. depth 12.5m, bottom time ca. 50mins

Dive site – eastern side of northern resident pontoons off Code Bay in The Bag
50˚ 14'.73 N 003˚ 45'.45 W

The seabed substrate at this point is sand, with the underwater topography being surprisingly undulating +/- ca. 1.5m.

Seabed habitat - the seabed is 90+% covered by marine life – much of this being filamentous and other forms of mainly red but also some brown seaweed attached to any hard substrate on the seabed. The bed supports a wide diversity of filter feeding animals, taking advantage of the obvious abundance of waterborne food – plankton and detritus; including abundant numbers of;
Peacock worm (*Sabella pavonina*)
slime worms (*Myxicola infundibulum*)
Megalomma vesiculosum – no common name – filter feeding tube worm
light bulb sea squirt (*Clavelina lepadiformis*)
Michelin man seasquirt (*Phallusia mammillata*)
dirty sea squirt (*Ascidiella aspersa*)
King scallop (*Pecten maximus*)
slipper limpets (*Crepidula fornicata*)
brittle star - unidentified

Other common animals included velvet swimming crabs (*Necora puber*), several types of unidentified spider crabs and pipe fish, Dahlia anemone (*Urticina feline*), Plumose anemone (*Metridium senile*) and a single spiny starfish (*Marthasterias glacialis*)

Scallops – only larger scallops were noticed (>100mm) and on average, were found at a density of about one scallop per $7m^2$ – needs a further survey to quantify this accurately. Many scallops were noticeably found at the bottom of shallow indentations of the seabed having probably formed around the scallop and possibly indicating that the scallop had been in that spot for some time.

Older, larger scallops were heavily covered by growths of other animals and seaweeds, typical of the area – indeed, a few were lying on their side held in place by large growths of seaweeds. The scallops were not badly covered by slipper limpets.

Of particular note – the deepest valleys of the seabed were heavily infested with very large densities of slipper limpets – forming a long 'snaking' biological reef of slipper limpets. Slipper limpets attached only to themselves, forming great horns of hummock'ed limpets. Interestingly, the greatest densities of scallops were found on top of these 'reefs' at ca. one scallop per m^2. (Slipper limpet reef accounted for less than 1% of area explored).

Nowhere during the survey, were scallops spotted at more than 2 within the same m^2.

Generally the seabed habitat here is very rich and particularly considering the sand nature of the substrate of a type that would be decimated by any form of dredged fishing gear. Further survey and monitoring would be necessary but it is suggested that the habitat could cope with a ranched density of 5 scallops per m^2.

Note – a video was made during most of the dive survey and will be made generally available upon the return of the master tape from the BBC Countryfile team. Close inspection of the footage may well show up significant wildlife not noticed at the time and remind us of some that was seen!

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