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Case Study

Project Location: Skomer Island Cameras

Client: The Wildlife Trust of South and West Wales
Date: Summer 2007

Project Description

The Island of Skomer is situated at the south western tip of Wales, and in the spring and summer is an important breeding area for Puffins, Guillemots, Razorbills and Manx Shearwaters. From late August it is also popular with a colony of Grey Seals. Numerous other species breed on or around the island, and the water surrounding it is a Marine Nature Reserve and dolphins and porpoises are frequently seen, as well as Sun Fish in search of the abundant Jellyfish.

The island is managed by the WTSWW and as a key part of The Skomer Island Heritage Experience Project (a £3.2 million Project supported by The Heritage Lottery Fund, Tubney Charitable Trust and the CCW) it was proposed that a network of cameras would be installed on the island; viewed and controlled from a new visitor centre on the mainland.



The WTSWW were familiar with our previous installations at the Scottish Seabird Centre, and asked OuterSight to survey the island and identify the best locations for the cameras. In consultation with the project team and the Skomer Warden, we decided that 4 cameras (2 PTZ and 2 Infrared Burrow cameras) were required to give the best coverage, and a camera system was designed accordingly. Due to the size of the island and location of the cameras, we used armoured fibre optic cable to carry the MPEG2 encoded video and audio signals to locations that had line of sight to the mainland, where they were transmitted via digital microwave. We then converted the signal back to fibre optic to transmit the video streams the final 500 metres into the visitor centre at Lockley Lodge.

Camera 1 is located at The Wick, which is probably the best known location as it not only has an abundance of the ever popular and photographically accommodating Puffins, but numerous other cliff nesting birds and some stunning views to Grassholm, home of 32,000 nesting pairs of



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Gannets. Camera 2 is located overlooking North Haven, and it too is surrounded by Puffin burrows and excellent views of Fulmars and Kittiwakes on the ledges above the beach. This camera can view down on to the beach where grey seals haul out to pup in the late summer and autumn. The two Infrared burrow cameras are located in Manx Shearwater Burrows near the farmhouse on the island, and allow visitors and researchers to see into the lives of these fascinating nocturnal burrowing birds. All the cameras are fitted with microphones which have proved to be very useful, with some amazing calls being heard in the Shearwater burrows.

To minimise the impact on the island it was decided to use long (up to 1.2KM) low voltage cables from the existing solar power generation plants at the research and accommodation building, rather than install additional Solar panels near the cameras.



The rebuilt Lockley Lodge on the mainland houses a 42" Plasma screen and an LCD touchscreen control panel, which visitors to the centre can use to select and move the cameras, as well as playing back pre-recorded footage which is recorded in very high quality on a Hard disk DVD recorder. The DVD recorder is easy for the staff to use, and editing and burning a new Highlights DVD can be achieved very easily. The Shearwater burrow cameras can also be viewed on the island at the farmhouse interpretation centre, which is great for those researchers and volunteers who quickly get addicted to staying awake until the middle of the night to see the Manx Shearwaters coming back into the burrow to feed the chicks.

The live images will also be available to view on the internet as we have installed a webcam server capable of displaying still images or live video from up to 6 cameras.

Visitors to Lockley lodge have been amazed by the quality of the images and sound coming back from the island, and especially being able to see the Manx Shearwater chicks. Being able to zoom in on a Puffin at close range and count the number of sand eels in its beak is amazing.



This has been a very exciting project, which will bring huge benefits to the WTSWW and allow more people to experience the magic of Skomer without over burdening the fragile ecosystem. Not only that, but it allows people who would be unable to climb the many steps from the boat landing to experience Skomer. We are looking forward to the spring of 2008 when the birds start arriving back on the island, and the cameras are turned back on. Have a look at www.skomerisland.co.uk for more information and to view the webcams.

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