Holy Loch Nature Reserve
Vision for the future

Holy Loch Nature Reserve has exceptional biodiversity due to its lack of human disturbance for many decades, except some light sheep grazing in late winter, and its many distinct habitats

But it is not an ecological island. It is subtly and deeply connected to its surrounding environment, with wildlife using these areas differently from how they interact with the reserve. And the loch floods its saltmarsh at spring tides, including the areas now grazed commercially, depositing who knows what, and altering its water composition, the latter deriving from a complex interaction of freshwater from rainfall and saltwater from spray and spring tides. Water from the surrounding land flows through it via various burns, and seawater is exchanged with the Clyde.

At the head of Stratheck the loch provides a flyaway for migrating waterfowl and then onward to Loch Fyne. The Forth Clyde gull flyway sees gulls heading from as far as the Baltic and Fennoscandia up the HL into Glen Lean (via the Dalinlongart landfill!!!) and then on to Lochs Striven, Riddon and then Fyne via Kames, Millhouse and Portavadie, west Loch Tarbert and the islands. I have found Fennoscandian birds at the Holy Loch before. Its Herring Gulls have bright orange rather than pink legs.

Cowal has an amazing wildlife story to tell, but most of the detail remains to be discovered. My personal quest is simply(!) to tell as much of the wildlife story of the Holy Loch as possible. It's small enough to achieve this goal. With mass low-cost, automated DNA barcoding now including marine species, even the previously undetectable comes within our reach. A complete list of all species in an ecosystem has never been achieved anywhere, but barcoding now allows this. It is throwing up dozens of known but hitherto unnamed species and dozens of new, named species to Scotland and Britain. I fully expect HLNR to have species new to science…these can be identified though their DNA.

If folks who dive in the loch can help add to that picture, that would complete the picture as we have just started looking at plankton using nets. I am about to use time-lapse to document what happens in our intertidal seagrass meadow as the tide brings it to life twice a day. We simply don't know who does what, where, when, but with patience, interrelationships should steadily reveal themselves.

All these little stories add up to a bigger picture which can be watched as climate change threatens what we have come to love and appreciate. It's my quest to tell every last little story because one of them may be so essential, that its loss could result in serious ecological distortion or even collapse. The loss of seagrass is one such event; fortunately it is now recovering.

The biggest hope for the future derives from natural forces around the loch restoring areas of human damage, especially a fully functioning woodland ecosystem on top of the old landfill, native vegetation reclaiming areas cleared of Japanese Knotweed, and seagrass reestablishing itself, quietly, almost unnoticed.

Natural processes on the reserve are also helping in the fight against climate change. Seagrass is highly efficient at sequestering carbon into the seabed, and at every spring tide, organic material is deposited onto the saltmarsh where it is locked into its soil.

Almost uniquely in the Clyde, the Holy Loch saltmarsh has the means to protect itself against winter storms and recover immediately afterwards. A Naturespot report identified the Holy Loch as almost the most suitable for coastal realignment in the Clyde. If we make the right decisions, natural processes will do the bulk of the donkey work, just like it's been doing for billions of years!

My faith has always been in Mother Earth and her ability to rebound if human beings keep out.

Neil Hammatt

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