Sunday 19th February 1-4 pm

**Towards a strategy for a global effort to address fundamental gaps in seaweed taxonomic knowledge**

**Contact details:** Prof. Juliet Brodie j.brodie@nhm.ac.uk and Dr Rob Mrowicki r.mrowicki@nhm.ac.uk (Natural History Museum, London, UK)

**Background:** Seaweed communities are integral to the functioning of marine ecosystems, and are the foundation of many of the world’s fisheries and the seaweed aquaculture industry. At the same time, seaweeds are being profoundly affected by environmental change. Yet, typically, seaweeds are barely mentioned in policy, conservation and environmental management. We need strengthened capacity for marine environmental protection and the tools to assist with training, conservation management and to raise awareness of these organisms and the vital role they play. Fundamental to this is an understanding of seaweed biodiversity and here lies the challenge. Juliet and Rob know from their recent work in the South Atlantic and Southern Ocean, that there is a tremendous amount of undescribed seaweed diversity and intriguing biogeographic patterns, and this is a finding that is replicated in many parts of the world. However, the taxonomic task to document the diversity is immense and requires a concerted cooperative global effort to resolve species concepts and to develop robust phylogenies that will provide the basis for identification, diversity, application and evolution.

**Aim:** The aim of this workshop is to bring the taxonomic and related members of the seaweed community together to form a network of researchers and to develop a strategy to address the global taxonomic challenges of documenting seaweed diversity. Driven in large part by Juliet and Rob’s work, the project will concentrate on understudied regions of the Southern Hemisphere, in particular, the South Atlantic and Southern Ocean. This is also relevant for conservation in comparison to the Northern Hemisphere because of the particular connectivity between land masses and islands in the vast areas oceans of that part of the world. We have also identified that there is a need to focus on characterising different groups in the Southern Hemisphere, including the Gigartinales, Corallinophycidae, Delesseriaceae, Ulvophyceae and Fucophycidae.

**The workshop:** The programme will include a mixture of talks and discussions, and will aim to come up with the framework for a draft strategy. This will include decisions on key taxonomic groups, where to focus effort taxonomically and geographically, role of herbarium collections, personnel, funding, timing, organisationsal approach.

**Future activities:** This workshop will provide an excellent framework for another workshop we are developing which will focus on one of the taxonomic groups identified at EPC8 in Brest in August 2023 (tentatively Delesseriaceae).

**Possible topics for discussion;** practical considerations; identifying who is doing what currently**;** outlining possible workpackages; how to maintain progress and commitment; how to highlight groups which need different expertise; identifying the gaps; working phylogenies – online collaboration; building more robust phylogenies; general logistics**;** creating a Southern Hemisphere network; AlgaeBase; curation.