Scientific interest in the sub-polar gyre of the North Atlantic Ocean has increased in recent years. The sub-polar gyre has contracted and weakened, and changes in circulation pathways have been linked to changes in marine ecosystem productivity. To aid fisheries and environmental scientists, we present here a time series of the Sub-Polar Gyre Index (SPG-I) based on monthly mean maps of sea surface height. The established definition of the SPG-I is applied, and the first EOF (empirical orthogonal function) and PC (principal component) are presented. Sensitivity to the spatial domain and time series length are explored but found not to be important factors in terms of the SPG-I’s interpretation. Our time series compares well with indices presented previously. The SPG-I time series is freely available online (http://dx.doi.org/10.7489/1806-1), and we invite the community to access, apply, and publish studies using this index time series.