The taxonomy & biogeography of macrofaunal amphipod crustaceans, with focus on the abyssal Pacific fauna relevant to the CCFZ.

Tammy Horton, National Oceanography Centre, Southampton

The most recent analysis of the occurrences of gammaridean amphipods in the deep sea records 400 species of amphipod from 54 families living deeper than 2000m (Jażdżewska, 2014). These numbers reduce to 100 species, and 31 families below 4000 m (Brandt et al, 2012).

The abyssal benthic amphipod fauna has been relatively little studied in the Pacific Ocean. The best studied region is that of the Northwest Pacific basin which was intensively studied with the cruises of the R/V Vitjaz 1949-1979 (Birstein & Vinogradov, 1955; 1958; Birstein & Vinogradova 1960; Kamenskaya, 1977; 1980; 1981; 1995; 1997). Owing to our lack of prior knowledge of the amphipod fauna of the CCFZ this presentation focuses on the amphipod taxa that will be likely encountered in the region and the resources needed to identify these taxa using standard morphology and stereo and compound microscopy.

Major sources of reference for most amphipod workers include Barnard & Karaman, 1991; The World Register of Marine species (WoRMS) and associated thematic databases the World Amphipod Database (WAD) and the World Register of Deep-Sea Species (WoRDSS). Many references, including identification resources such as original descriptions and more modern treatments can be found linked on WoRMS, WAD and WoRDSS.