

Table 7. Information on taxonomic resolution and available time series for selected taxa from the CPR database. From Batten et al. (2003), Edwards (2000), Continuous Plankton Recorder Survey Team (2003), the CPR database and unpublished data. Procedures for counting zooplankton have generally remained unchanged since 1948, and phytoplankton counting procedures since 1958 (exceptions noted below). Note that dates given here represent the date when the species was looked for, not when it was first seen. In addition, it should be remembered that changes in the area that the survey samples markedly influences the recording of species.

Taxon	Abundance	Comments
<i>Branchiostoma lanceolatum</i> (Pallas 1774)	1946	
<i>Calanus</i> I-IV	1958	Juveniles of all <i>Calanus</i> species.
<i>Calanus finmarchicus</i> (Gunnerus 1770), <i>C. glacialis</i> Jaschnov 1955, <i>C. helgolandicus</i> (Claus 1863)	1958	Recorded as separate species from 1958. <i>C. glacialis</i> separated from <i>C. finmarchicus</i> based on size alone. Species grouped from 1946-1957.
<i>Calanus hyperboreus</i> (Krøyer 1838)	1946	
Caligoida	1946	Nearly all records are <i>Caligus elongatus</i> Nordmann 1832.
<i>Candacia armata</i> (Boeck 1872) egg	1997	Denoted as "spiny egg" in the survey. Eggs of other copepod species are recorded together.
Caprellids	1946	For species see Vane (1951).
<i>Cavolinia</i> sp.	1967	
Cephalopod larvae	1946	May include post larvae. Some identification may be suspect.
Chaetognaths	1946	Recorded separately in traverse and eyecount. For species see Bainbridge (1963).
Cirripede larvae	1958	Recorded as present since 1946. These are Balanidae and Verrucidae larvae. For species see Roskell (1975).
<i>Clausocalanus</i> sp.	1946	For species see Williams and Wallace (1975).
<i>Clio</i> sp.	1946	
<i>Clione limacina</i> (Phipps 1774)	1946	
Coccolithaceae	1993	Recorded as present since 1965.
Coelenterates	1946	Only recorded as present. Often identified by presence of nematocysts.
Copepod eggs	1993	Recorded as present 1948-1957 and since 1974. Individual eggs are counted for both free and sac spawners. Only <i>Candacia armata</i> (Boeck 1872) eggs are recorded separately.
Copepod nauplii	1958	Recorded as present since 1946.
<i>Coscinodiscus wailesii</i> Gran and Angst 1931	1977	Invasive; first recorded in European waters in the English Channel in 1977.
Cumaceans	1946	
Cyphonautes larvae	1958	Recorded as present since 1946.
Decapod larvae	1946	For species see Lindley (1987).
<i>Dictyocysta</i> sp.	1996	Counted as total Tintinnids previously.
Dinoflagellate cysts	1993	Recorded as present since 1974. For species see Reid (1978).
<i>Dinophysis acuminata</i> (Claparède and Lachmann 1859), <i>D. acuta</i> Ehrenberg 1839, <i>D. caudata</i> Saville-Kent 1881, <i>D. norvegica</i> Claparède and Lachmann 1859, <i>D. rotundata</i> Claparède and Lachmann 1859 (= <i>Phalacroma rotundatum</i>), <i>D. sacculus</i> Stein 1883, <i>D. tripos</i> Gourret 1883	2004	Previously all <i>Dinophysis</i> species were grouped (recorded as present since 1948, abundance from 1958).
Doliolids	1949-1957, 1978-present	For species see Hunt (1968).
Echinoderm larvae	1949	For species see Rees (1954a).
Echinoderm post-larvae	1946	
Euphausiids	1946	Separated into juveniles and adults from 1968-1988.
<i>Evadne</i> sp.	1958	Recorded within Total Cladocera from 1948-1957.
<i>Favella serrata</i> (Möbius 1887)	1996	Recorded within total Tintinnids previously.
Fish eggs	1946	

Fish larvae	1946	See Coombs (1980) for species recorded.
Foraminiferans	1993	Recorded as present since 1946.
Gammarids	1946	For species see Vane (1951).
<i>Gonyaulax</i> sp.	1965	Includes other genera in Gonyaulaceae (e.g. <i>Alexandrium</i>)
<i>Halosphaera</i> sp.	1996	Recorded as present since 1948. Counting method changed in 1996.
Harpacticoids	1946	Includes mainly <i>Microsetella</i> sp.
Hyperiid	1946	For species see McHardy (1970). Vane (1951)???
Isopods	1947	
Lamellibranch larvae	1949	Recorded as present since 1946. For species see Rees (1954b).
Larvaceans	1958	Recorded as present since 1946. The following species have been identified. <i>Oikopleura dioica</i> Fol 1872, <i>O. labradoriensis</i> Lohmann 1892, <i>Fritillaria borealis</i> Lohmann 1896 and <i>F. pellucida</i> Busch 1851.
<i>Lepas</i> nauplii	1955	For species see Bainbridge and Roskell (1966).
<i>Limacina retroversa</i> (Fleming 1823)	1958	Recorded as present since 1946.
<i>Lucifer typus</i> H. Milne-Edwards 1837	1997	
<i>Mesocalanus</i> (= <i>Calanus</i>) <i>tenuicornis</i> (Dana 1849)	1946	
<i>Navicula planamembranacea</i> (Hendey 1964) (= <i>Ephemera planamembranacea</i>)	1962	First described from CPR samples in the NW Atlantic in 1962.
<i>Noctiluca scintillans</i> Macartney 1810	1981	
Ostracods	1947	For species see Williams (1975).
<i>Pachysphaera</i> (= <i>Tasmanites</i>) sp.	1958	
<i>Parafavella gigantea</i> (Brandt 1896)	1996	Recorded within total Tintinnids previously.
Parasitic nematode	1948	
<i>Penilia</i> sp.	1946	Probably introduction into North Sea by ballast water in early 1990s.
<i>Phaeocystis</i> spp.	1946	Abundance recorded from 1948-1957. Only recorded as present since.
Phytoplankton Colour	1946	Measured in four categories.
<i>Pinus</i> pollen	1997	
<i>Podon</i> sp.	1958	Recorded within Total Cladocera from 1948-1957.
Polychaete larvae	1958	Recorded as present since 1946. <i>Tomopteris</i> sp. excluded.
<i>Polykrikos schwartzii</i> cysts Bütschli 1873 (Umrindetencysts)	1993	Recorded as present since 1975. The unarmoured motile cells are not recorded in CPR samples.
<i>Pseudocalanus</i> sp.	1958	Includes only adult females and adult males. In the NE Atlantic and North Sea these are probably <i>Pseudocalanus acuspes</i> (Giesbrecht 1881), <i>P. elongatus</i> (Boeck 1865) and <i>P. minutus</i> (Krøyer 1845).
<i>Ptychocylis</i> sp.	1996	Recorded within total Tintinnids previously. For species see Lindley (1975).
Radiolarians	1993	Recorded as present 1948-1957. Includes Acantharians. From 2004, Acantharians recorded separately.
Rotifer eggs	1984	Adults are not identifiable in CPR samples.
Salps	1949-1957, 1978-present	For species see Hunt (1968).
<i>Scrippsiella</i> sp.	1982	Most records are of <i>Scrippsiella trochoidea</i> (Stein 1883).
Sergestid larvae	1962	For species see Lindley (1987).
Silicoflagellatae	1993	Recorded as present 1948-1957 and since 1964.

Siphonophores	1958	Calycophorans only.
Spindelei	1983	Eggs of <i>Kuhnia scombri</i> , a monogenean gill parasite of mackerel <i>Scomber scombrus</i> .
Stellate body	1996	Land plant hair.
Thaliaceans (salps and doliolids)	1946-1960	Recorded as present since 1946. Salps and doliolids also recorded separately.
Tintinnids	1993	Recorded as present 1948-1957. For species see Lindley (1975)
<i>Tintinnopsis</i> sp.	1996	Recorded within total Tintinnids previously. For species see Lindley (1975).
<i>Tomopteris</i> sp.	1946	Recorded separately from Polychaete larvae.
<i>Zoothamnium pelagicum</i> Stein 1859	1993	Recorded as present since 1964. Counted as number of colonies.

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