**Ecopath input data**

Biomass estimates were obtained from different sources from the study area or surrounding areas (). The three MPA models shared biomass data on some FGs (marine mammals, seabirds, sea turtles, pelagic fish, some invertebrates’ groups, zooplankton and phytoplankton) due to the lack of local data and/or the closeness among these MPAs. Fish and invertebrate biomasses were estimated using data from (1) underwater visual census (UVC) (Claudet, 2013, Hereu Fina, Aspillaga Cuevas et al., 2017), (2) bottom trawl surveys performed in adjacent areas (Mediterranean International Trawl Surveys, MEDITS; see Bertrand, Gil de Sola et al. (2002)), and (3) additional information found in the literature. MEDITS trawling survey data was used to extract biomass estimates and was weighted by the bathymetry strata where species occurred. We extracted MEDITS trawling survey data from the closest stations to each MPA in order to have biomass data for those species that were not present during UVC. This assumption was assessed previously by expert knowledge from Safenet project (Coll, Vilas et al., 2019). For several pelagic fish species, available data from MEDITS and MEDIAS (acoustic) surveys were used. As these surveys did not fully cover coastal areas, scaling factors based on species depth distribution from AQUAMAPS (Kaschner, Kesner-Reyes et al., 2016) were used to correct biomass estimates of the pelagic fish groups.

Production (P/B, year-1) and consumption (Q/B, year-1) rates were estimated through the application of empirical equations (Heymans et al., 2016), taken from literature or from other models developed in the Northwestern Mediterranean Sea (Coll, Palomera et al., 2006; Corrales, Coll et al., 2015; Coll, Vilas et al., 2019). Additionally, local body lengths of reef-associated species obtained from UVC Calò, Di Franco et al., 2018) were used to estimate those rates using empirical equations.

Catch data were obtained from different sources (SOM 2) and included recreational and small-scale catch. Small-scale fisheries in Cerbère-Banyuls were acquired from a local study (Prats 2016), while for Cap de Creus and Medes Islands, landings were obtained from an official dataset of the regional government of Catalonia managed by the Institute of Marine Sciences (ICM-CSIC) (Tudó 2017). For Cap de Creus, these landings were from Llançà, Port de la Selva, Cadaqués and Roses harbours, where the main fleet operating is coming from. These landings were scaled by the number of boats and months fishing inside the MPA (Gómez, Lloret et al., 2006). For Medes Islands, landings were from l’Estartit harbour. To these official landings, we incorporated percentages of discards from a literature review based on the Spanish Mediterranean and Gulf of Cadiz region (Coll, Carreras et al., 2014). Regarding recreational fisheries catch, we used information from Ivanhoff, Payrot et al. (2010) (Cerbère-Banyuls), Lloret, Zaragoza et al. (2008) and Lloret, Zaragoza et al. (2008) (Cap de Creus) and Sacanell (2012) (Medes Islands).

**Table 1.** Species composition, methods and references used to estimate the basic input parameters of the three MPA Ecopath models of Cerbère-Banyuls, Cap de Creus and Medes Islands.

|  |  |  |
| --- | --- | --- |
| **Basic Input parameters** | **Method** | **Source** |
| **1. Bottlenose dolphins (BOD):** *Tursiops truncatus* |
| **B** |  | (Forcada et al., 2004) |
| **P/B** | Life history table | (Barlow and Boveng, 1991) |
| **Q/B** | From modified energy requirement equation: E =aW0.714 | (Blanco et al., 2001; Hunter, 2006; Kastelein et al., 2003; Pauly et al., 1998; Pavan et al., 2013) |
| **D** |  | (Blanco et al., 2001) |
| **2. Striped dolphins (STD):** *Stenella coeruleoalba* |
| **B** |  | (Forcada and Hammond, 1998) |
| **P/B** | Life history table | (Barlow and Boveng, 1991) |
| **Q/B** | From modified energy requirement equation: E =aW0.714 | (Di-Méglio et al., 1996; Hunter, 2006; Marsili et al., 1997; Pauly et al., 1998; Pavan et al., 2013) |
| **D** |  | (Aznar et al., 2017) |
| **3.** **Endangered and pelagic seabirds (ENS):** *Calonectris diomedea, Hydrobates pelagicus melitensis, Puffinus yelkouan, Puffinus mauretanicus* |
| **B** |  | (Abelló and Oro, 1998; Amengual et al., 1999; Arcos et al., 2012; Arroyo et al., 2016; Bourgeois et al., 2011; du Rau et al., 2015; Gallo-Orsi, 2003; Genovart et al., 2016; Grémillet et al., 2014; Paracuellos and Jerez, 2003; Paracuellos and Nevado, 2003; Pettex et al., 2017; Thibault et al., 1996; Zotier et al., 1999) |
| **P/B** | Mortality (z)= -ln(Survival rate) | (Krebs, 1989) |
| **Q/B** | Yearly food intake (including breeding and no breeding seasons)/B | (Karpouzi et al., 2007; Paleczny, 2012) |
| **D** |  | (Arcos and Oro, 2002; Bourgeois et al., 2011; Granadeiro et al., 1998) |
| **4.** **Gulls and cormorants (GUC):** *Larus audouinii, Larus genei, Larus melanocephalus, Larus michahellis, Phalacrocorax aristotelis, Phalacrocorax carbo* |
| **B** |  | (Abelló and Oro, 1998; Amengual et al., 1999; Arcos et al., 2012; Arroyo et al., 2016; Bourgeois et al., 2011; du Rau et al., 2015; Gallo-Orsi, 2003; Genovart et al., 2016; Grémillet et al., 2014; Paracuellos and Jerez, 2003; Paracuellos and Nevado, 2003; Pettex et al., 2017; Thibault et al., 1996; Zotier et al., 1999) |
| **P/B** | Mortality (z)= -ln(Survival rate) | (Krebs, 1989) |
| **Q/B** | Yearly food intake (including breeding and no breeding seasons)/B | (Karpouzi et al., 2007; Paleczny, 2012) |
| **D** |  | (Goutner, 1994; Morat et al., 2014; Talmat-Chaouchi et al., 2014; Van Eerden and Munsterman, 1986) |
| **5.** **Terns (TER):** *Sterna albifrons, Sterna caspia, Sterna hirundo, Sterna nilotica, Sterna sandvicensis* |
| **B** |  | (Abelló and Oro, 1998; Amengual et al., 1999; Arcos et al., 2012; Arroyo et al., 2016; Bourgeois et al., 2011; du Rau et al., 2015; Gallo-Orsi, 2003; Genovart et al., 2016; Grémillet et al., 2014; Paracuellos and Jerez, 2003; Paracuellos and Nevado, 2003; Pettex et al., 2017; Thibault et al., 1996; Zotier et al., 1999) |
| **P/B** | Mortality (z)= -ln(Survival rate) | (Krebs, 1989) |
| **Q/B** | Yearly food intake (including breeding and no breeding seasons)/B | (Karpouzi et al., 2007; Paleczny, 2012) |
| **D** |  | (Dies et al., 2005) |
| **6.** **Loggerhead turtle (LGT):** *Caretta caretta* |
| **B** |  | (de Segura et al., 2006; Lauriano et al., 2011) |
| **P/B** | Mortality (z)= -ln(Survival rate) | (Casale et al., 2015; Casale and Heppell, 2016; Krebs, 1989) |
| **Q/B** | Yearly food intake/B | (Hatase and Tsukamoto, 2008) |
| **D** |  | (Cardona et al., 2012a) |
| **7.** **Non-commercial large pelagic fish (NLP):** *Cetorhinus maximus, Mobula mobular, Mola mola* |
| **B** |  | (di Sciara et al., 2015; Mancusi et al., 2005) and International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Fortuna et al., 2014; Parker and Stott, 1965; Powell, 2003)  |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Coull et al., 1989; Matthews and Parker, 1950) |
| **D** |  | (Grémillet et al., 2017) |
| **8.** **Other large pelagic fish (OLP):** *Coryphaena hippurus, Lichia amia, Seriola dumerili* |
| **B** |  | (Morales-Nin and Azevedo, 2004) and International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Gatt et al., 2015; Morey et al., 2003)  |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Gatt et al., 2015; Morey et al., 2003)  |
| **D** |  | (Cardona et al., 2012b; Coetzee, 1982) |
| **9.** **Mackerels (MCK):** *Scomber scombrus, Scomber colias, Scomber spp.* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Campillo, 1992; Velasco et al., 2011)  |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997; Torres et al., 2012) |
| **D** |  | (Apostolidis and Stergiou, 2014; Cardona et al., 2012b) |
| **10.** **Horse mackerels (HRM):** *Trachurus trachurus, Trachurus mediterraneus, Trachurus picturatus* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Vasconcelos et al., 2006; Zupa et al., 2006) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Torres et al., 2012) |
| **D** |  | (Buttay, 2009; Cardona et al., 2012b; Cresson et al., 2014) |
| **11.** **Other medium pelagic fish (OMP):** *Alosa fallax, Caranx rhonchus, Pomatomus saltatrix, Sphyraena sphyraena* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Allam et al., 2004; Backus, 1962; Coull et al., 1989; Douchement, 1981; Quignard and Douchement, 1991) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Quignard and Douchement, 1991; Stergiou and Moutopoulos, 2001a; Torres et al., 2012) |
| **D** |  | (Dhieb et al., 2001; Kalogirou et al., 2012; Karachle, 2008; Mostarda et al., 2007) |
| **12.** **European sardine (ESA):** *Sardina pilchardus* |
| **B** |  | Mediterranean International Acoustic Survey (MEDIAS) (MEDIAS, 2012), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (De Ranieri, 2011) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992) |
| **D** |  | (Demirhindi, 1961) |
| **13.** **European anchovy (EAN):** *Engraulis encrasicolus* |
| **B** |  | Mediterranean International Acoustic Survey (MEDIAS) (MEDIAS, 2012), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Colloca et al., 2013) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992) |
| **D** |  | (Tudela and Palomera, 1997) |
| **14.** **Other small pelagic fish (OSP):** *Cubiceps gracilis, Spicara flexuosa, Spicara maena, Spicara smaris, Spicara spp., Sprattus sprattus* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002), and scaled with Aquamaps (Kaschner et al., 2016) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Apostolidis and Stergiou, 2014; Passelaigue, 1974; Zavodnik, 1969) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997; Sinovčić et al., 2004) |
| **D** |  | (Cresson et al., 2014; Khoury, 1987; Tičina et al., 2000) |
| **15.** **Anglerfish (ANG):** *Lophius budegassa, Lophius piscatorius* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Scientific and for Fisheries (STECF), 2013; Tsimenidis, 1980) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Apostolidis and Stergiou, 2014; Merella et al., 1997) |
| **D** |  | (López et al., 2016; Macpherson, 1981) |
| **16.** **European conger (ECO):** *Conger conger* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Campillo, 1992) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997) |
| **D** |  | (Bell, 1983) |
| **17.** **European hake (EHK):** *Merluccius merluccius* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Campillo, 1992) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Aldebert and Recasens, 1995) |
| **D** |  | (Mellon-Duval et al., 2017) |
| **18.** **Poor cod (PCO):** *Trisopterus capelanus* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Planas and Vives, 1952) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997) |
| **D** |  | (Biagi et al., 1992) |
| **19.** **Common pandora (CPA):** *Pagellus erythrinus* |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) |
| **B Cap de Creus** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **B Medes** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Planas and Vives, 1952) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992) |
| **D** |  | (Cresson et al., 2014) |
| **20.** **Sparidae (SPA):** *Boops boops, Diplodus annularis, Diplodus cervinus, Diplodus puntazzo, Oblada melanura, Pagrus pagrus, Sparus aurata, Spondyliosoma cantharus* |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Hereu Fina and Quintana Pou, 2012; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco 2017) and k parameter from (Derbal and Kara, 2006; Froglia, 1984; Girardin, 1978; Quignard, 1986; Vassilopoulou, 1989) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992; Merella et al., 1997) |
| **D** |  | (Bell, 1983; Benchalel et al., 2010; Chessa et al., 2004; Cresson et al., 2014; Labropoulou and Papadopoulou-Smith, 1999; Lenfant and Olive, 1998; Rosecchi and Nouaze, 1985; Sala and Ballesteros, 1997) |
| **21. White seabream (WSE):** *Diplodus sargus* |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Hereu Fina and Quintana Pou, 2012; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco 2017) and k parameter from (Man-Wai and Quignard, 1982) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992)  |
| **D** |  | (Cresson et al., 2014) |
| **22. Common two-banded seabream:** *Diplodus vulgaris* |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Hereu Fina and Quintana Pou, 2012; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco 2017) and k parameter from (Girardin, 1978) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992) |
| **D** |  | (Bell, 1983) |
| **23.** **Common dentex (DEN):** *Dentex dentex* |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Hereu Fina and Quintana Pou, 2012; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco 2017) and k parameter from (Morales-Nin and Moranta, 1997) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Morales-Nin and Moranta, 1997) |
| **D** |  | (Morales-Nin and Moranta, 1997) |
| **24. Red scorpionfish (RSC):** *Scorpaena scrofa* |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Bradai and Bouain, 1988) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Morey et al., 2003) and Lmax from UVC (Di Franco, 2017) |
| **D** |  | (Bell, 1983) |
| **25.** **Scorpaenidae (SCO):** *Chelidonichthys cuculus, Chelidonichthys obscurus, Eutrigla gunardus, Lepidotrigla cavillona, Scorpaena elongate, Scorpaena notata, Scorpaena porcus, Scorpaena spp.*  |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) and International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Bradai and Bouain, 1988; Ordines et al., 2009) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Morey et al., 2003) |
| **D** |  | (Bell, 1983; Colloca et al., 1994; Labropoulou and Plaitis, 1997; Moreno-Amich, 1994; Ordines et al., 2012) |
| **26. Groupers:** *Epinephelus marginatus* |
| **B Banyuls** |  | Underwater Visual Census (UVC) (Claudet, 2013) |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Hereu Fina and Quintana Pou, 2012; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Bouchereau et al., 1999; Girardin, 1978) |
| **Q/B** |  | Empirical equation from (Pauly 1990); *a* and *b* parameters from (Morey et al. 2003) |
| **D** |  | (Linde et al., 2004) |
| **27. Brown meagre:** *Sciaena umbra* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Hereu Fina and Quintana Pou, 2012; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Chauvet, 1991) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Morey et al., 2003) |
| **D** |  | (Karachle, 2008) |
| **28.** **Labridae and serranidae (LAS):** *Coris julis, Labrus merula, Labrus viridis, Serranus cabrilla, Serranus scriba, Symphodus cinereus, Symphodus doderleini, Symphodus mediterraneus, Symphodus ocellatus, Symphodus roissali, Symphodus rostratus, Symphodus spp., Symphodus tinca* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Cheung et al., 2013; Froese and Binohlan, 2003; Gordoa et al., 2000; Papaconstantinou et al., 1994) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Gordoa et al., 2000; Merella et al., 1997; Morey et al., 2003; Stergiou and Moutopoulos, 2001b; Valle et al., 2003) |
| **D** |  | (Arculeo et al., 1993; Bell, 1983; Kabasakal, 2001) |
| **29.** **Flatfish (FLA):** *Arnoglossus thori, Arnoglossus laterna, Buglossidium luteum, Citharus linguatula, Lepidorhombus whiffiagonis, Scophthalmus rhombus, Solea solea, Symphurus nigrescens* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Deniel, 1990; García-Rodríguez and Acón, 2000; Giovanardi and Piccinetti, 1984; Landa et al., 1996; Stergiou and Politou, 1995; Vianet et al., 1989) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997; Morey et al., 2003; Vianet et al., 1989) |
| **D** |  | (Bell, 1983; Cresson et al., 2014; Darnaude et al., 2004; De Juan et al., 2007; Fanelli et al., 2009; Macpherson, 1981; Morte et al., 1999; Pellegrini and Barghigiani, 1989; Wyche and Shackley, 1986) |
| **30.** **Other commercial medium demersal fish (CMD):** *Dicentratus labrax, Phycis phycis* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | (Hereu Fina et al., 2017) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Morey et al., 2003; Nony, 1983; Stergiou and Politou, 1995) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992) |
| **D** |  | (Cresson et al., 2014; Macpherson, 1981) |
| **31.** **No commercial medium demersal fish (NMD):** *Muraena helena* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Matić-Skoko et al., 2014) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Morey et al., 2003) |
| **D** |  | (Sallami et al., 2014) |
| **32. Salema (SAL):** *Sarpa salpa* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Verlaque, 1985) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Morey et al., 2003)  |
| **D** |  | (Verlaque, 1985) |
| **33. Mugilidae (MUG):** *Chelon labrosus* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Morey et al., 2003) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Campillo, 1992) |
| **D** |  | (Blanco et al., 2003) |
| **34. Red mullet (RMU):** *Mullus barbatus* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **B Medes** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Levi et al., 1992) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997)  |
| **D** |  | (Esposito et al., 2014) |
| **35. Surmullet (SUR):** *Mullus surmuletus* |
| **B Banyuls** |  | (Claudet, 2013)  |
| **B Cap de Creus** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **B Medes** |  | (García-Rubies and i Limousin, 1990; Macpherson et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Campillo, 1992) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997)  |
| **D** |  | (Bell, 1983) |
| **36.** **No** **commercial small demersal fish (NSD):** *Blennidae, Chromis chromis, Gobius sp.* |
| **B** |  | (García-Rubies and i Limousin, 1990) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); Lmax from UVC (Di Franco, 2017) and k parameter from (Maiorano et al., 2010; Merella et al., 1997; Morey et al., 2003; Sangun et al., 2007) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Lamprakis et al., 2003; Morey et al., 2003) |
| **D** |  | (Bell, 1983; Karachle, 2008; Pinnegar et al., 2000; Zander and Berg, 1984) |
| **37.** **Small-spotted catshark (SPC):** *Scyliorhinus canicula* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Županovic, 1961) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997)  |
| **D** |  | (Macpherson, 1981) |
| **38.** **Rays and skates (RSK):** *Raja asterias* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Abdel-Aziz, 1992) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Merella et al., 1997)  |
| **D** |  | (Navarro et al., 2013) |
| **39. Torpedos (TOR):** *Torpedo marmorata* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** | Mortality (z)= F+M | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Duman and Başusta, 2013) |
| **Q/B** |  | Empirical equation from (Pauly, 1990); *a* and *b* parameters from (Morey et al., 2003) |
| **D** |  | (Barría et al., 2015) |
| **40.** **Coastal benthic cephalopods (CBC):** *Octopus vulgaris, Sepia officinalis* |
| **B** |  | (Valls et al., 2012) |
| **P/B** |  | (Brey, 1990)  |
| **Q/B** |  | (Rodhouse and Nigmatullin, 1996); W from (Palomera et al., 2015) |
| **D** |  | (Castro and Guerra, 1990; Quetglas et al., 1998) |
| **C** |  | (Ivanoff et al., 2010; Prats, 2016) |
| **41.**. **Benthopelagic cephalopods (BPC): A***lloteuthis media, Alloteuthis spp., Alloteuthis subulata, Illex coindetii, Loligo spp., Loligo vulgaris* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Rodhouse and Nigmatullin, 1996); W from (Palomera et al., 2015) |
| **D** |  | (Martínez-Baena et al., 2016; Rosas-Luis and Sánchez, 2015; Valls et al., 2015) |
| **42.** **Other benthic cephalopods (BCE):** *Eledone cirrhosa, Eledone moschata, Sepia elegans, Sepia spp, Sepietta oweniana, Sepiola intermedia, Sepiola spp.* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** |   | (Brey, 1990) |
| **Q/B** |  | (Rodhouse and Nigmatullin, 1996); W from (Palomera et al., 2015) |
| **D** |  | (Castro and Guerra, 1990; Šifner and Vrgoč, 2009; Valls, 2017) |
| **43.** **Bivalves (BIV):** *Bivalvia spp,**Pinna nobilis* |
| **B Banyuls** |  | (De Juan et al., 2011; Preuvost, 2011) |
| **B Cap de Creus** |  | *estimated* |
| **B Medes** |  | *estimated* |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Sarà et al., 2003) |
| **44.** **Gastropods (GAS):** *Gastropoda spp* |
| **B Banyuls** |  | (De Juan et al., 2011) |
| **B Cap de Creus** |  | *estimated* |
| **B Medes** |  | *estimated* |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Heymans et al., 2016) |
| **D** |  | (Mazzella and Russo, 1989) |
| **45.** **European lobster (LOB)**: *Palinurus elephas* |
| **B Banyuls** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **B Cap de Creus** |  | (Hereu Fina and Quintana Pou, 2012) |
| **B Medes** |  | (Hereu Fina and Quintana Pou, 2012) |
| **P/B** |  | (Heymans et al., 2016) |
| **Q/B** |  | Empirical equation from (Pauly, 1980); L∞ and k parameter from (Sardà, 2000) |
| **D** |  | (Goñi et al., 2001) |
| **46.** **Other commercial decapods (OCD)**: *Maja squinado, Squilla mantis* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Pauly et al., 1993b) |
| **D** |  | (Bernárdez et al., 2000; Froglia, 1989) |
| **47.** **Non-commercial decapods (NDC):** *Dardanus arrosor, Dromia personata, Ethusa mascarone, Goneplax romboides, Liocarcinus depurator, Maja brachydactila, Medorippe lanata, Pagurus excavatus, Pagurus spp, Pilumnus spp, Pisa armata* |
| **B** |  | *estimated* |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Pauly et al., 1993b) |
| **D** |  | (Abelló and Cartes, 1987) |
| **48.** **Purple sea urchin (PSU):** *Paracentrotus lividus* |
| **B Banyuls** |  | (Schvartz and Labbe, 2012) |
| **B Cap de Creus** |  | (Hereu Fina and Quintana Pou, 2012) |
| **B Medes** |  | (Hereu Fina and Quintana Pou, 2012) |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Pauly et al., 1993b) |
| **D** |  | (Murillo-Navarro and Jiménez-Guirado, 2012) |
| **49.** **Other sea urchins (OSU):** *Arbacia lixula, Sphaerechinus granularis* |
| **B Banyuls** |  | (Schvartz and Labbe, 2012) |
| **B Cap de Creus** |  | (Hereu Fina and Quintana Pou, 2012) |
| **B Medes** |  | (Hereu Fina and Quintana Pou, 2012) |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Pauly et al., 1993b) |
| **D** |  | (Rodríguez, 1972) |
| **50.** **Sea cucumbers (SCU):** *Holothuria spp* |
| **B** |  | *estimated* |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Pauly et al., 1993b) |
| **D** |  | (Coulon and Jangoux, 1993) |
| **51.**  **Other macro-benthos (OMB):** Actinaria sp, Ascidiacea sp., *Asteroidea sp., Ophiuroidea sp., Polychaeta sp., Porifera sp* |
| **B** |  | *estimated* |
| **P/B** |  | (Brey, 1990) |
| **Q/B** |  | (Pauly et al., 1993b) |
| **D** |  | (Rodríguez, 1972) |
| **52.** **Jellyfish (JLL):** *Aequorea forskalea, Aurelia aurita, Chrysaora hysoscella, Hydrozoa, Pelagia noctiluca, Rhizostoma pulmo, Pleurobrachia pileus* |
| **B** |  | International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** |  | (Coll, 2018) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Sabatés et al., 2010) |
| **53.**  **Salps (SAL):** *Thalia democratic, Salpa fusiformis, Salpa maxima, Pyrosoma, Pyrosoma atlanticum* |
| **B** |  | (Pascual Torner, 2016) and International Bottom Trawl Survey in the Mediterranean (MEDITS) (Bertrand et al., 2002) |
| **P/B** |  | (Coll, 2018) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Pascual Torner, 2016) |
| **54. Red coral (RCO):** *Corallium rubrum* |
| **B Banyuls** |  | (Septentrion Environement, 2015) |
| **B Cap de Creus** |  | (Coll, 2018) |
| **B Medes** |  | (Coll, 2018) |
| **P/B** |  | (Coll, 2018) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Tsounis et al., 2006) |
| **55.** **Other corals and gorgonians (CGO):** *Bryozoa, Alcyonium acaule, Alcyonium palmatum, Alcyonium spp., Eunicella cavolini, Eunicella filiformis, Eunicella singularis*  |
| **B Banyuls** |  | (Schvartz and Labbe, 2012) |
| **B Cap de Creus** |  | (Coll, 2018) |
| **B Medes** |  | (Coll, 2018) |
| **P/B** |  | (Coll, 2018) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Rossi, 2001) |
| **56.** **Macro zooplankton (MAZ)** |
| **B** |  | (Gaudy et al., 2003) |
| **P/B** |  | (Heymans et al., 2016) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Båmstedt and Karlson, 1998) |
| **57.** **Meso and micro zooplankton (MMZ)** |
| **B** |  | (Gaudy et al., 2003) |
| **P/B** |  | (Coll, 2018) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Calbet et al., 2002) |
| **58. Suprabenthos (SUB)** |
| **B** |  | *estimated* |
| **P/B** |  | (Corbera et al., 2013) |
| **Q/B** |  | (Coll, 2018) |
| **D** |  | (Cartes et al., 2001) |
| **59. Mediterranean seagrass (POS):** *Posidonia oceanica* |
| **B Banyuls** |  | (Ferrari, 2006) |
| **B Cap de Creus** |  | (Hereu Fina and Quintana Pou, 2012) |
| **B Medes** |  | (Hereu Fina and Quintana Pou, 2012) |
| **P/B** |  | (Coll, 2018) |
| **60. Other seagrasses:** |
| **B Banyuls** |  | *nonpresent* |
| **B Cap de Creus** |  | (EMODnet, 2014) |
| **B Medes** |  | (EMODnet, 2014) |
| **P/B** |  | (Coll, 2018) |
| **61. Erected algae (EAL):** |
| **B Banyuls** |  | *nonpresent* |
| **B Cap de Creus** |  | (Giannoulaki, 2013) |
| **B Medes** |  | (Giannoulaki, 2013) |
| **P/B** |  | (Coll, 2018) |
| **62. Seaweeds (SEA):** |
| **B Banyuls** |  | (Mellado, 2006) |
| **B Cap de Creus** |  | (Giannoulaki, 2013) |
| **B Medes** |  | (Giannoulaki, 2013) |
| **P/B** |  | (Coll, 2018) |
| **63. Small phytoplankton (SMP):** |
| **B** |  | (Joint Research Centre, 2017a) |
| **P/B** |  | (Joint Research Centre, 2017b) |
| **64. Large phytoplankton (LPH):** |
| **B** |  | (Joint Research Centre, 2017a) |
| **P/B** |  | (Joint Research Centre, 2017b) |
| **65. Detritus (DET):** |
| **B** |  | (Pauly et al., 1993a) |
| **66. Discards and by-catch (DIB) –** (except FPA) |
| **B Banyuls** |  | (Prats, 2016) |
| **B Cap de Creus** |  | (Tudó, 2017) |
| **B Medes** |  | (Tudó, 2017) |
| **67. Recreational fishery (RFI) –** (except FPA) |
| **C Banyuls** |  | (Ivanoff et al., 2010) |
| **C Cap de Creus** |  | (Sacanell, 2012) |
| **C Medes** |  | (Sacanell, 2012) |
| **68. Artisanal fishery (AFI) –** (except FPA) |
| **C Banyuls** |  | (Prats, 2016) |
| **C Cap de Creus** |  | (Tudó, 2017) |
| **C Medes** |  | (Tudó, 2017) |

**References**

Abelló, Pere, and Joan E. Cartes. 1987. “Observations on the Diet of Liocarcinus Depurator (L.)(Brachyura: Portunidae) in the Catalan Sea.” *Investigacion Pesquera (Spain)*.

Abelló, Pere, and Daniel Oro. 1998. “Offshore Distribution of Seabirds in the Northwestern Mediterranean in June 1995.” *Colonial Waterbirds*, 422–26.

Aldebert, Y., and L. Recasens. 1995. “Estimation de La Croissance Du Merlu Dans Le Golfe Du Lion Par l’analyse Des Fréquences de Tailles.” *Rapport de La Commission Internationale de La Mer Méditerranée* 34: 236.

Allam, SOHAIR M., SAMIR N. Faltas, and EVELYN Ragheb. 2004. “Age and Growth of Barracudas in the Egyptian Mediterranean Waters.” *Egyptian Journal of Aquatic Research* 30: 281–89.

Amengual, J. F., G. Gargallo, M. Suarez, J. Bonnin, J. M. Gonzalez, M. Rebassa, and M. McMinn. 1999. “The Mediterranean Storm Petrel Hydrobates Pelagicus Melitensis at Cabrera Archipelago (Balearic Islands, Spain): Breeding Moult, Biometry and Evaluation of the Population Size by Mark and Recapture Techniques.” *Ringing & Migration* 19 (3): 181–90.

Apostolidis, C., and K. I. Stergiou. 2014. “Estimation of Growth Parameters from Published Data for Several M Editerranean Fishes.” *Journal of Applied Ichthyology* 30 (1): 189–94.

Arcos, José Manuel, Juan Bécares, Dani Villero, Lluís Brotons, Beneharo Rodríguez, and Asunción Ruiz. 2012. “Assessing the Location and Stability of Foraging Hotspots for Pelagic Seabirds: An Approach to Identify Marine Important Bird Areas (IBAs) in Spain.” *Biological Conservation* 156: 30–42.

Arcos, José Manuel, and Daniel Oro. 2002. “Significance of Fisheries Discards for a Threatened Mediterranean Seabird, the Balearic Shearwater Puffinus Mauretanicus.” *Marine Ecology Progress Series* 239: 209–20.

Arculeo, M., C. Froglia, and S. Riggio. 1993. “Food Partitioning between Serranus Scriba and Scorpaena Porcus (Perciformes) on the Infralittoral Ground of the South Tyrrhenian Sea.” *Cybium* 3 (17): 251–58.

Arroyo, Gonzalo M., Maria Mateos-Rodriguez, Antonio R. Munoz, AndreS De la Cruz, David Cuenca, and Alejandro Onrubia. 2016. “New Population Estimates of a Critically Endangered Species, the Balearic Shearwater Puffinus Mauretanicus, Based on Coastal Migration Counts.” *Bird Conservation International* 26 (1): 87–99.

Aznar, Francisco J., R. Míguez-Lozano, B. Ruiz, A. Bosch de Castro, J. A. Raga, and C. Blanco. 2017. “Long-Term Changes (1990-2012) in the Diet of Striped Dolphins Stenella Coeruleoalba from the Western Mediterranean.” *Marine Ecology Progress Series* 568: 231–47.

Backus, Richard H. 1962. *Age in a Small Sample of Bluefish (Pomatomus Saltatrix (Linnaeus))*.

Båmstedt, Ulf, and Karin Karlson. 1998. “Euphausiid Predation on Copepods in Coastal Waters of the Northeast Atlantic.” *Marine Ecology Progress Series* 172: 149–68.

Barlow, Jay, and Peter Boveng. 1991. “Modeling Age‐specific Mortality for Marine Mammal Populations.” *Marine Mammal Science* 7 (1): 50–65.

Barnabé, G. 1973. “Contribution a La Connaissance de La Croissance et de La Sexualité Du Loup (Dicentrarchus Labrax L.) de La Région de Sète.” *Ann Inst Océanogr* 49: 49–75.

Barría, Claudio, Marta Coll, and Joan Navarro. 2015. “Unravelling the Ecological Role and Trophic Relationships of Uncommon and Threatened Elasmobranchs in the Western Mediterranean Sea.” *Marine Ecology Progress Series* 539: 225–40.

Bell, J. D. 1983. “Fish Fauna of French Mediterranean Posidonia Oceanica Seagrass Meadows. II. Feeding Habits.” *Tethys* 11: 1–14.

Bernárdez, C., J. Freire, and Eduardo González-Gurriarán. 2000. “Feeding of the Spider Crab Maja Squinado in Rocky Subtidal Areas of the Ría de Arousa (North-West Spain).” *Journal of the Marine Biological Association of the United Kingdom* 80 (1): 95–102.

Bertrand, Jacques A, L Orsi Relini, C Papaconstantinou, S Jukic-Peladic, A Souplet, L Gil de Sola, C Piccinetti, S Kavadas, and M Rossi. 2002. “Mediterranean Marine Demersal Resources: The Medits International Trawl Survey (1994-1999) Sci. Mar. 66 (Suppl. 2): 2002.” *Sci. Mar* 66 (2): 103–24.

Biagi, Franco, Stefano de Ranieri, and Claudio Viva. 1992. “Recruitment, Length at First Maturity and Feeding of Poor‐cod, Trisopterus Minutus Capelanus, in the Northern Tyrrhenian Sea.” *Italian Journal of Zoology* 59 (1): 87–93.

Blanco, C., O. Salomón, and J. A. Raga. 2001. “Diet of the Bottlenose Dolphin (Tursiops Truncatus) in the Western Mediterranean Sea.” *Journal of the Marine Biological Association of the United Kingdom* 81 (6): 1053–58.

Blanco, Saúl, Susana Romo, María-José Villena, and Susana Martínez. 2003. “Fish Communities and Food Web Interactions in Some Shallow Mediterranean Lakes.” *Hydrobiologia* 506 (1–3): 473–80.

Bouchereau, J. L., P. Body, and C. Chauvet. 1999. “Growth of the Dusky Grouper Epinephelus Marginatus (Linnnaeus, 1758)(Teleostei, Serranidae), in the Natural Marine Reserve of Lavezzi Islands, Corsica, France.” *Scientia Marina* 63 (1): 71–77.

Bourgeois, Karen, Justine Vorenger, Lucie Faulquier, Jérôme Legrand, and Eric Vidal. 2011. “Diet and Contamination of the Yelkouan Shearwater Puffinus Yelkouan in the Hyères Archipelago, Mediterranean Basin, France.” *Journal of Ornithology* 152 (4): 947–53.

Brey, Thomas. 1990. “Estimating Productivity of Macrobenthic Invertebrates from Biomass and Mean Individual Weight.” *MEERESFORSCHUNG/REP. MAR. RES.* 32 (4): 329–43.

Buttay, Lucie. 2009. “Ecología Trófica de Los Juveniles de Jurel Trachurus Trachurus y Trachurus Mediterraneus.” *Trabajo de Master Ciencias Del Mar. Gestión Del Medio Marino*.

Calbet, Albert, Elisabetta Broglio, Enric Saiz, and Miquel Alcaraz. 2002. “Low Grazing Impact of Mesozooplankton on the Microbial Communities of the Alboran Sea: A Possible Case of Inhibitory Effects by the Toxic Dinoflagellate Gymnodinium Catenatum.” *Aquatic Microbial Ecology* 26 (3): 235–46.

Calò, A., A. Di Franco, et al. (2018). "Deliverable 3.1 -Databases on marine assemblages. Sustainable Fisheries in EU Mediterranean waters through network of MPAs - Safenet MARE/2014/41. 14 pp."

Campillo, Albert. 1992. “Les Pêcheries Françaises de Méditerranée. Synthèse Des Connaissances.”

Cardona, Luis, Irene Álvarez De Quevedo, Assumpcio Borrell, and Alex Aguilar. 2012. “Massive Consumption of Gelatinous Plankton by Mediterranean Apex Predators.” *PloS One* 7 (3): e31329.

Cartes, Joan E., M. Elizalde, and J. C. Sorbe. 2001. “Contrasting Life-Histories, Secondary Production, and Trophic Structure of Peracarid Assemblages of the Bathyal Suprabenthos from the Bay of Biscay (NE Atlantic) and the Catalan Sea (NW Mediterranean).” *Deep Sea Research Part I: Oceanographic Research Papers* 48 (10): 2209–32.

Casale, Paolo, Daniela Freggi, Giovanni Furii, Carola Vallini, Pasquale Salvemini, Michele Deflorio, Giovanni Totaro, Stefano Raimondi, Caterina Fortuna, and Brendan J. Godley. 2015. “Annual Survival Probabilities of Juvenile Loggerhead Sea Turtles Indicate High Anthropogenic Impact on Mediterranean Populations.” *Aquatic Conservation: Marine and Freshwater Ecosystems* 25 (5): 690–700.

Casale, Paolo, and Selina S. Heppell. 2016. “How Much Sea Turtle Bycatch Is Too Much? A Stationary Age Distribution Model for Simulating Population Abundance and Potential Biological Removal in the Mediterranean.” *Endangered Species Research* 29 (3): 239–54.

Castro, Bernardino, and Angel Guerra. 1990. “The Diet of Sepia Officinalis (Linnaeus, 1758) and Sepia Elegans (D’Orbigny, 1835) (Cephalopoda, Sepioidea) from the Ria de Vigo(NW Spain).” *Sci. Mar.* 54 (4): 375–88.

Chauvet, C. 1991. “Le Corb Ou Brown Meagre (Sciaena Umbra Linnaeus, 1758). Quelques Éléments de Sa Biologie.” *Les Especies Marines a Protéger En Méditerranée, France, GIS Posidonie Publication*, 229–35.

Chessa, Lorenzo Antonio, Antonio Pais, Michele Scardi, S. Serra, and G. Atzori. 2004. “Osservazioni Sul Regime Alimentare Di Diplodus Annularis (Linnaeus, 1758) Nello Stagno Di Calich (Sardegna Nord Occidentale)= Observations on the Feeding Behaviour of Diplodus Annularis (Linnaeus, 1758) in the Calich Lagoon (North Western Sardinia).” *Biologia Marina Mediterranea* 11 (2): 573–76.

Cheung, William WL, Jorge L. Sarmiento, John Dunne, Thomas L. Frölicher, Vicky WY Lam, ML Deng Palomares, Reg Watson, and Daniel Pauly. 2013. “Shrinking of Fishes Exacerbates Impacts of Global Ocean Changes on Marine Ecosystems.” *Nature Climate Change* 3 (3): 254.

Claudet, J. 2013. “Unpubl. Data. Underwater Visual Census of Cerbére-Banyuls Marine Protected Area.”

Coetzee, D. J. 1982. “Stomach Content Analysis of the Leervis, Lichia Amia (L.), from the Swartvlei System, Southern Cape.” *African Zoology* 17 (4): 177–81.

Coll, M., M. Carreras, et al. (2014). "Closer to reality: Reconstructing total removals in mixed fisheries from Southern Europe." Fisheries Research **154**: 179-194.

Coll, M., I. Palomera, et al. (2006). "Trophic flows, ecosystem structure and fishing impacts in the South Catalan Sea, Northwestern Mediterranean." Journal of Marine Systems **59**(1): 63-96.

Coll, M., D. Vilas, et al. (2019). Report describing the quantitative models. Sustainable Fisheries in EU Mediterranean waters through network of MPAs - Safenet MARE/2014/41 Deliverable 4.2:62.

Colloca, Francesco, Gian Domenico Ardizzone, and Maria Flavia Gravina. 1994. “Trophic Ecology of Gurnards (Pisces: Triglidae).” *Mar. Life* 4 (2): 45–57.

Colloca, Francesco, Massimiliano Cardinale, Francesc Maynou, Marianna Giannoulaki, Giuseppe Scarcella, Klavdija Jenko, Josè Maria Bellido, and Fabio Fiorentino. 2013. “Rebuilding Mediterranean Fisheries: A New Paradigm for Ecological Sustainability.” *Fish and Fisheries* 14 (1): 89–109. https://doi.org/10.1111/j.1467-2979.2011.00453.x.

Corbera, Jordi, Daniel Martin, Susana Pinedo, and Rafael Sarda. 2013. “Cumacean Density, Biomass and Productivity in the Sandy Bottoms of the Bay of Blanes (Western Mediterranean).” *Cahiers de Biologie Marine* 54: 63–70.

Coull, K. A., A. S. Jermyn, A. W. Newton, G. I. Henderson, and W. B. Hall. 1989. *Length/Weight Relationships for 88 Species of Fish Encountered in the North East Atlantic*. Marine Laboratory Lib.

Corrales, X., M. Coll, et al. (2015). "Ecosystem structure and fishing impacts in the northwestern Mediterranean Sea using a food web model within a comparative approach." Journal of Marine Systems **148**: 183-199.

Coulon, Pierre, and Michel Jangoux. 1993. “Feeding Rate and Sediment Reworking by the Holothuroid Holothuria Tubulosa (Echinodermata) in a Mediterranean Seagrass Bed off Ischia Island, Italy.” *Marine Ecology Progress Series*, 201–4.

Cresson, Pierre, Sandrine Ruitton, Mélanie Ourgaud, and Mireille Harmelin-Vivien. 2014. “Contrasting Perception of Fish Trophic Level from Stomach Content and Stable Isotope Analyses: A Mediterranean Artificial Reef Experience.” *Journal of Experimental Marine Biology and Ecology* 452: 54–62.

Darnaude, Audrey M., Chantal Salen-Picard, Nicholas VC Polunin, and Mireille L. Harmelin-Vivien. 2004. “Trophodynamic Linkage between River Runoff and Coastal Fishery Yield Elucidated by Stable Isotope Data in the Gulf of Lions (NW Mediterranean).” *Oecologia* 138 (3): 325–32.

De Juan, S. 2007. “Effects of Commercial Trawling Activities on Benthic Communities from the NW Mediterranean Sea.” *University of Barcelona*.

De Juan, Silvia, Montserrat Demestre, and Pilar Sanchez. 2011. “Exploring the Degree of Trawling Disturbance by the Analysis of Benthic Communities Ranging from a Heavily Exploited Fishing Ground to an Undisturbed Area in the NW Mediterranean.” *Scientia Marina* 75 (3): 507–16.

De Ranieri, S. 2011. “Programma Nazionale Italiano per La Raccolta Di Dati Alieutici 2010. Campionamento Biologico Delle Catture. Sezioni C Ed E. Rapporto Finale. Consorzio per Il Centro Interuniversitario Di Biologia Marina Ed Ecologia Applicata “G. Bac.”

Demirhindi, U. 1961. “Nutrition of the Sardine (Sardina Pilchardus Walb.).” In *Proceedings and Technical Papers of the General Fisheries Council for the Mediterranean*. Vol. 6.

Deniel, C. 1990. “Comparative Study of Growth of Flatfishes on the West Coast of Brittany.” *Journal of Fish Biology* 37 (1): 149–66.

Derbal, Farid, and M. Hichem Kara. 2006. “Régime Alimentaire Du Sar Tambour Diplodus Cervinus Cervinus (Sparidae) Des Côtes de l’est Algérien.” *Cybium* 30 (2): 161–70.

Dhieb, K., M. Ghorbel, and A. Bouain. 2001. “Regime Alimentaire de Pomatomus Saltatrix (Teleostei, Pomatomidae) Dans Le Golfe de Gabes.” *Tunisie. Rapp. Comm. Int. Mer Médit* 36: 259.

Di Franco, A. 2017. “Unpubl. Data. Underwater Visual Census of Marine Protected Areas in Western Mediterranean Sea.”

Dies, J. Ignacio, Jennifer Marín, and Carlos Pérez. 2005. “Diet of Nesting Gull-Billed Terns in Eastern Spain.” *Waterbirds* 28 (1): 106–9.

Di-Méglio, Nathalie, R. Romero-Alvarez, and A. Collet. 1996. “Growth Comparison in Striped Dolphins, Stenella Coeruleoalba, from the Atlantic and Mediterranean Coasts of France.” *Aquatic Mammals* 22 (1): 11–21.

Duman, Ömer Veli, and Nuri Başusta. 2013. “Age and Growth Characteristics of Marbled Electric Ray Torpedo Marmorata (Risso, 1810) Inhabiting Iskenderun Bay, North-Eastern Mediterranean Sea.” *Turkish Journal of Fisheries and Aquatic Sciences* 13 (3).

Esposito, Valentina, Franco Andaloro, Daniela Bianca, Antonino Natalotto, Teresa Romeo, Gianfranco Scotti, and Luca Castriota. 2014. “Diet and Prey Selectivity of the Red Mullet, Mullus Barbatus (Pisces: Mullidae), from the Southern Tyrrhenian Sea: The Role of the Surf Zone as a Feeding Ground.” *Marine Biology Research* 10 (2): 167–78.

Fabi, Gianna, and Gianfranco Giannetti. 1985. “Growth Parameters of the Black Goby (Gobius Niger L.) in the Adriatic Sea, Based on Otoliths Reading.” *Rapp. Comm. Int. Mer Médit* 29 (8): 87–90.

Fanelli, E., F. Badalamenti, G. D’Anna, and C. Pipitone. 2009. “Diet and Trophic Level of Scaldfish Arnoglossus Laterna in the Southern Tyrrhenian Sea (Western Mediterranean): Contrasting Trawled versus Untrawled Areas.” *Journal of the Marine Biological Association of the United Kingdom* 89 (4): 817–28.

Ferrari, Bruno. 2006. “Etude Synécologique de Posidonia Oceanica et de Sarpa Salpa Le Long de La Côte Rocheuse Des Albères (Pyrénées-Orientales, France): Influence d’une Aire Marine Protégée.”

Forcada, Jaume, Manel Gazo, Alex Aguilar, Joan Gonzalvo, and Mar Fernández-Contreras. 2004. “Bottlenose Dolphin Abundance in the NW Mediterranean: Addressing Heterogeneity in Distribution.” *Marine Ecology Progress Series* 275: 275–87.

Forcada, Jaume, and Philip Hammond. 1998. “Geographical Variation in Abundance of Striped and Common Dolphins of the Western Mediterranean.” *Journal of Sea Research* 39 (3–4): 313–25.

Fortuna, Caterina Maria, Laurence Kell, Draško Holcer, Simonepietro Canese, Elio Filidei Jr, Peter Mackelworth, and Greg Donovan. 2014. “Summer Distribution and Abundance of the Giant Devil Ray (Mobula Mobular) in the Adriatic Sea: Baseline Data for an Iterative Management Framework.” *Scientia Marina* 78 (2): 227–37.

Froese, Rainer, and C Binohlan. 2003. “Simple Methods to Obtain Preliminary Growth Estimates for Fishes.” *Journal of Applied Ichthyology* 19 (6): 376–79.

Froglia, C. 1989. “Field Observations on Diel Rhythms in Catchability and Feeding of Squilla Mantis (L.)(Crustacea, Stomatopoda) in the Adriatic Sea.” *Biology of Stomatopods*.

Gallo-Orsi, Umberto. 2003. “Species Action Plans for the Conservation of Seabirds in the Mediterranean Sea: Audouin’s Gull, Balearic Shearwater and Mediterranean Shag.” *Scientia Marina* 67 (S2): 47–55.

García-Rodríguez, Mariano, and Esteban Acón. 2000. “Contribution to the Knowledge of Citharus Linguatula (Linaeus, 1758)(Osteicthyes, Heterosomata) in the Iberian Mediterranean.”

García-Rubies, Antoni, and Mikel Zabala i Limousin. 1990. “Effects of Total Fishing Prohibition on the Rocky Fish Assemblages of Medes Islands Marine Reserve (NW Mediterranean).” *Scientia Marina, 1990, Vol. 54, Num. 4, p. 317-328*.

Gatt, Mark, Mark Dimech, and Patrick Joseph Schembri. 2015. “Age, Growth and Reproduction of Coryphaena Hippurus (Linnaeus, 1758) in Maltese Waters, Central Mediterranean.” *Mediterranean Marine Science* 16 (2): 334–45.

Gaudy, Raymond, Faïçal Youssara, Frédéric Diaz, and Patrick Raimbault. 2003. “Biomass, Metabolism and Nutrition of Zooplankton in the Gulf of Lions (NW Mediterranean).” *Oceanologica Acta* 26 (4): 357–72.

Genovart, Meritxell, Jose Manuel Arcos, David Álvarez, Miguel McMinn, Rhiannon Meier, Russell B Wynn, Tim Guilford, and Daniel Oro. 2016. “Demography of the Critically Endangered Balearic Shearwater: The Impact of Fisheries and Time to Extinction.” *Journal of Applied Ecology* 53 (4): 1158–68.

Giovanardi, O., and C. Piccinetti. 1984. “Biology and Fishery Aspects of the Scaldfish Arnoglossus Laterna (Walbaum) 1792, in the Adriatic Sea.” *FAO Fisheries Report (FAO)*.

Girardin, M. 1978. “Les Sparidae (Pisces, Teleostei) Du Golfe Du Lion—Ecologie et Biogeographie.” *Université Des Sciences et Techniques Du Languedoc, Laboratoire D’Ichthyologie et de Parasitologie Générale, Montpellier, Diplome D’Estudes Approfundies D’Écologie Générale et Apliquée-Option Ecologie Aquatique P* 146.

Girardin, Michel. 1981. “Pagellus Erythrinus (Linnaeus, 1758) et Boops Boops (Linnaeus, 1758)(Pisces, Sparidae) Du Golf de Lion: Écobiologie, Prises Commerciales et Modéles de Gestion.” Laboratoire d’ichtyologie et de parasditologie général (Université des sciences et technique du Languedoc).

Gómez de Segura, A., J. Tomás, Susana Noemi Pedraza, Enrique Alberto Crespo, and Juan Antonio Raga. 2006. “Abundance and Distribution of the Endangered Loggerhead Turtle in Spanish Mediterranean Waters and the Conservation Implications.” *Animal Conservation* 9 (2): 199–206.

Gómez, S., J. Lloret, et al. (2006). "The decline of the artisanal fisheries in Mediterranean coastal areas: the case of Cap de Creus (Cape Creus)." Coastal Management **34**(2): 217-232.

Goñi, Raquel, Antoni Quetglas, and Olga Reñones. 2001. “Diet of the Spiny Lobster Palinurus Elephas (Decapoda: Palinuridea) from the Columbretes Islands Marine Reserve (North-Western Mediterranean).” *Journal of the Marine Biological Association of the United Kingdom* 81 (2): 347–48.

Gordoa, Ana, Balbina Molı́, and Nuria Raventós. 2000. “Growth Performance of Four Wrasse Species on the North-Western Mediterranean Coast.” *Fisheries Research* 45 (1): 43–50.

Goutner, Vassilis. 1994. “The Diet of Mediterranean Gull (Larus Melanocephalus) Chicks at Fledging.” *Journal Für Ornithologie* 135 (2): 193–201.

Granadeiro, José P., Luís R. Monteiro, and Robert W. Furness. 1998. “Diet and Feeding Ecology of Cory’s Shearwater Calonectris Diomedea in the Azores, North-East Atlantic.” *Marine Ecology Progress Series*, 267–76.

Grémillet, David, Clara Péron, Jean-Baptiste Pons, Ridha Ouni, Matthieu Authier, Mathieu Thévenet, and Jérôme Fort. 2014. “Irreplaceable Area Extends Marine Conservation Hotspot off Tunisia: Insights from GPS-Tracking Scopoli’s Shearwaters from the Largest Seabird Colony in the Mediterranean.” *Marine Biology* 161 (11): 2669–80.

Grémillet, David, Craig R. White, Matthieu Authier, Ghislain Dorémus, Vincent Ridoux, and Emeline Pettex. 2017. “Ocean Sunfish as Indicators for the ‘Rise of Slime.’” *Current Biology* 27 (23): R1263–64.

Hatase, Hideo, and Katsumi Tsukamoto. 2008. “Smaller Longer, Larger Shorter: Energy Budget Calculations Explain Intrapopulation Variation in Remigration Intervals for Loggerhead Sea Turtles (Caretta Caretta).” *Canadian Journal of Zoology* 86 (7): 595–600.

Hereu Fina, B., E. Aspillaga Cuevas, et al. (2017). "Seguiment del medi marí al Parc Natural del Cap de Creus i al Parc Natural del Montgrí, les Illes Medes i el Baix Ter. Memòria 2016."

Hunter, Andrea Margaret Jetske. 2006. “A Multiple Regression Model for Predicting the Energy Requirements of Marine Mammals.” University of British Columbia.

Ivanoff, Pauline, Jérome Payrot, and Marion Verdoit-Jarraya. 2010. “A Recreational Fishery Survey inside and Outside a Marine Protected Area (North-Western Mediterranean) over One Year: Typology, Seasonal Variability and Reserve’s Influence.” *Mémoire Master. Université Montpellier*.

Jennings, Simon, Simon PR Greenstreet, and John D. Reynolds. 1999. “Structural Change in an Exploited Fish Community: A Consequence of Differential Fishing Effects on Species with Contrasting Life Histories.” *Journal of Animal Ecology* 68 (3): 617–27.

Kabasakal, Hakan. 2001. “Description of the Feeding Morphology and the Food Habits of Four Sympatric Labrids (Perciformes, Labridae) from South-Eastern Aegean Sea, Turkey.” *Netherlands Journal of Zoology* 51 (4): 439–55.

Kalogirou, S., F. Mittermayer, L. Pihl, and H. Wennhage. 2012. “Feeding Ecology of Indigenous and Non‐indigenous Fish Species within the Family Sphyraenidae.” *Journal of Fish Biology* 80 (7): 2528–48.

Karachle, P. K. 2008. “Oikologia Tīs Diatrofīs Tōn Sīmantikoterōn Ichthyapothematōn Tou Voreiou Aigaiou.[Feeding Ecology of the Most Important Fish Stock in the North Aegean Sea.].” PhD Dissertation, Aristotle University of Thessaloniki, Greece.[In Greek.].

Karpouzi, Vasiliki S., Reg Watson, and Daniel Pauly. 2007. “Modelling and Mapping Resource Overlap between Seabirds and Fisheries on a Global Scale: A Preliminary Assessment.” *Marine Ecology Progress Series* 343: 87–99.

Kaschner, K, K Kesner-Reyes, C Garilao, J Rius-Barile, T Rees, and R Froese. 2016. “AquaMaps: Predicted Range Maps for Aquatic Species. World Wide Web Electronic Publication, Www.Aquamaps.Org, Version 08/2016.”

Kastelein, R. A., C. Staal, and P. R. Wiepkema. 2003. “Food Consumption, Food Passage Time, and Body Measurements of Captive Atlantic Bottlenose Dolphins (Tursiops Truncatus).” *Aquatic Mammals* 29 (1): 53–66.

Khoury, Claude. 1987. “Ichtyofaune Des Herbiers de Posidonies Du Parc National de Port-Cros: Composition, Éthologie Alimentaire et Rôle Dans Le Reseau Trophique.” Aix Marseille 2.

Krebs, Charles J. 1989. “Ecological Methodology.” Harper & Row New York.

Labropoulou, M., and K.-N. Papadopoulou-Smith. 1999. “Foraging Behaviour Patterns of Four Sympatric Demersal Fishes.” *Estuarine, Coastal and Shelf Science* 49: 99–108.

Labropoulou, M., and W. Plaitis. 1997. “Selective Predation on Small Crustaceans by Six Demersal Fish Species in Iraklion Bay (Cretan Sea, North-Eastern Mediterranean).” *Oceanographic Literature Review* 2 (44): 120.

Lamprakis, M. K., A. A. Kallianiotis, D. K. Moutopoulos, and K. I. Stergiou. 2003. “Weight-Length Relationships of Fishes Discarded by Trawlers in the North Aegean Sea.” *Acta Ichthyologica et Piscatoria* 2 (33).

Landa, J., C. Pineiro, and N. Pérez. 1996. “Megrim (Lepidorhombus Whiffiagonis) Growth Patterns in the Northeast Atlantic.” *Fisheries Research* 26 (3–4): 279–94.

Lauriano, Giancarlo, Simone Panigada, Paolo Casale, Nino Pierantonio, and Greg P. Donovan. 2011. “Aerial Survey Abundance Estimates of the Loggerhead Sea Turtle Caretta Caretta in the Pelagos Sanctuary, Northwestern Mediterranean Sea.” *Marine Ecology Progress Series* 437: 291–302.

Lenfant, P., and C. Olive. 1998. “Gradual Changing of the Diet of Juveniles of the Saddled Seabream (Oblada Melanura, Sparidae) during the Recruitment.” *Cybium* 22 (3): 203–10.

Levi, Dino, G. Andreoli, and Pietro Rizzo. 1992. “Growth Curves from Representative Samples of Fish Population as Possible Hints for the Identification of Unit Stocks: The Case Study of Red Mullet from the Sicilian Channel.” In *Marine Eutrophication and Population Dynamics. Proceedings of the 25th EMBS (European Marine Biology Symposium). Olsen & Olsen, Fredensborg, Denmark*, 299–306.

Linde, Marta, Antoni M. Grau, Francesca Riera, and Enric Massutí-Pascual. 2004. “Analysis of Trophic Ontogeny in Epinephelus Marginatus (Serranidae).” *Cybium* 28 (1): 27–35.

López, Nieves, Joan Navarro, Claudio Barría, Marta Albo-Puigserver, Marta Coll, and Isabel Palomera. 2016. “Feeding Ecology of Two Demersal Opportunistic Predators Coexisting in the Northwestern Mediterranean Sea.” *Estuarine, Coastal and Shelf Science* 175: 15–23.

Lloret, J., N. Zaragoza, et al. (2008). "Spearfishing pressure on fish communities in rocky coastal habitats in a Mediterranean marine protected area." Fisheries Research **94**(1): 84-91.

Lloret, J., N. Zaragoza, et al. (2008). "Biological and socioeconomic implications of recreational boat fishing for the management of fishery resources in the marine reserve of Cap de Creus (NW Mediterranean)." Fisheries Research **91**(2-3): 252-259.

Macpherson, E. 1981. “Resource Partitioning in a Mediterranean Demersal Fish Community.” *Marine Ecology Progress Series*, 183–93.

Mancusi, Cecilia, Simona Clò, Marco Affronte, Mohamed Nejmeddline Bradaï, Farid Hemida, Fabrizio Serena, Alen Soldo, and Marino Vacchi. 2005. “On the Presence of Basking Shark (Cetorhinus Maximus) in the Mediterranean Sea.” *Cybium* 29 (4): 399–405.

Marsili, Letizia, Carolina Casini, Luca Marini, Andrea Regoli, and Silvano Focardi. 1997. “Age, Growth and Organochlorines (HCB, DDTs and PCBs) in Mediterranean Striped Dolphins Stenella Coeruleoalba Stranded in 1988—1994 on the Coasts of Italy.” *Marine Ecology Progress Series*, 273–82.

Martínez-Baena, Francisco, Joan Navarro, Marta Albo-Puigserver, Isabel Palomera, and Rigoberto Rosas-Luis. 2016. “Feeding Habits of the Short-Finned Squid Illex Coindetii in the Western Mediterranean Sea Using Combined Stomach Content and Isotopic Analysis.” *Journal of the Marine Biological Association of the United Kingdom* 96 (6): 1235–42.

Matić-Skoko, Sanja, Pero Tutman, Mirela Petrić, Daria Skaramuca, Domagoj Đikić, Duje Lisičić, and Bo ko Skaramuca. 2011. “Mediterranean Moray Eel Muraena Helena (Pisces: Muraenidae): Biological Indices for Life History.” *Aquatic Biology* 13 (3): 275–84.

Matthews, L. Harrison, and Hampton Wildman Parker. 1950. “Notes on the Anatomy and Biology of the Basking Shark (Cetorhinus Maximus (Gunner)).” In *Proceedings of the Zoological Society of London*, 120:535–76. Wiley Online Library.

Mazzella, Lucia, and Giovanni F. Russo. 1989. “Grazing Effect of Two Gibbula Species (Mollusca, Archaeogastropoda) on the Epiphytic Community of Posidonia Oceanica Leaves.” *Aquatic Botany* 35 (3–4): 357–73.

MEDIAS. 2012. “Report of 5th Meeting for MEDIterranean Acoustic Surveys in the Framework of European Data Collection Framework (DCF) (Sliema, Malta, 2012).”

Mellado, Tiscar. 2006. “Modelo Ecopath de Las Islas Medas (MSc Thesis).” Universitat de Barcelona.

Mellon-Duval, Capucine, Mireille Harmelin-Vivien, Luisa Métral, Véronique Loizeau, Serge Mortreux, David Roos, and Jean Marc Fromentin. 2017. “Trophic Ecology of the European Hake in the Gulf of Lions, Northwestern Mediterranean Sea.” *Scientia Marina* 81 (1): 7–18.

Merella, P., A. Quetglas, F. Alemany, and A. Carbonell. 1997. “Length-Weight Relationship of Fishes and Cephalopods from the Balearic Islands (Western Mediterranean).” *Naga, the ICLARM Quarterly* 20 (3–4): 66–68.

Morales-Nin, Beatriz, and Manica Azevedo. 2004. “GFCM SAC Sub-Committee of Stock Assessment Assessment Form Sheets - Dolphinfish (2004).” http://webco.faocopemed.org/old\_copemed/reports/dolphinfish/fichasac04.pdf.

Morales-Nin, Beatriz, and Joan Moranta. 1997. “Life History and Fishery of the Common Dentex (Dentex Dentex) in Mallorca (Balearic Islands, Western Mediterranean).” *Fisheries Research* 30 (1–2): 67–76.

Morat, Fabien, Alain Mante, Emilie Drunat, Jennifer Dabat, Patrick Bonhomme, Mireille Harmelin-Vivien, and Yves Letourneur. 2014. “Diet of Mediterranean European Shag, Phalacrocorax Aristotelis Desmarestii, in a Northwestern Mediterranean Area: A Competitor for Local Fisheries.” *Scientific Report Port-Cros National Park* 28: 113–32.

Moreno-Amich, R. 1994. “Feeding Habits of Grey Gurnard, Eutrigla Gurnardus (L., 1758), along the Catalan Coast (Northwestern Mediterranean).” *Hydrobiologia* 273 (1): 57–66.

Morey, Gabriel, Joan Moranta, E. Massutı, A. Grau, Marta Linde, Francisco Riera, and Beatriz Morales-Nin. 2003. “Weight–Length Relationships of Littoral to Lower Slope Fishes from the Western Mediterranean.” *Fisheries Research* 62 (1): 89–96.

Morte, Salomé, Manuel J. Redón, and Antonio Sanz-Brau. 1999. “Feeding Ecology of Two Megrims Lepidorhombus Boscii and Lepidorhombus Whiffiagonis in the Western Mediterranean (Gulf of Valencia, Spain).” *Journal of the Marine Biological Association of the United Kingdom* 79 (1): 161–69.

Mostarda, E., D. Campo, L. Castriota, V. Esposito, M. P. Scarabello, and F. Andaloro. 2007. “Feeding Habits of the Bullet Tuna Auxis Rochei in the Southern Tyrrhenian Sea.” *Journal of the Marine Biological Association of the United Kingdom* 87 (4): 1007–12.

Murillo-Navarro, R., and D. Jiménez-Guirado. 2012. “Relationships between Algal Food and Gut and Gonad Conditions in the Mediterranean Sea Urchin Paracentrotus Lividus (Lam.).” *Mediterranean Marine Science* 13 (2): 227–38.

Navarro, Joan, Marta Coll, Marc Preminger, and Isabel Palomera. 2013. “Feeding Ecology and Trophic Position of a Mediterranean Endemic Ray: Consistency between Sexes, Maturity Stages and Seasons.” *Environmental Biology of Fishes* 96 (12): 1315–28.

Ordines, Francesc, Maria Valls, and Adam Gouraguine. 2012. “Biology, Feeding and Habitat Preferences of Cadenat’s Rockfish, Scorpaena Loppei (Actipoterygii: Scorpaeniformes: Scorpaenidae), in the Balearic Islands (Western Mediterranean).” *Acta Ichthyologica et Piscatoria* 42 (1).

Paleczny, Michelle. 2012. “An Analysis of Temporal and Spatial Patterns in Global Seabird Abundance during the Modern Industrial Era, 1950-2010, and the Relationship between Global Seabird Decline and Marine Fisheries Catch.” University of British Columbia.

Palomera, Isabel, Joan Navarro, Marta Albo Puigserver, Marta Coll, Claudio Barría, X. Corrales, Nieves López, et al. 2015. *The ECOTRANS Project: Unraveling the Trophic Pathways and Energy Transfer from Small Pelagic Fish to Top Predators in the Mediterranean Sea*. Integrated Marine Biogeochemistry and Ecosystem Research. http://hdl.handle.net/10261/139792.

Paracuellos, Mariano, and Diego Jerez. 2003. “A Comparison of Two Seabird Communities on Opposite Coasts of the Alborán Sea (Western Mediterranean).” *Scientia Marina* 67 (S2): 117–23.

Paracuellos, Mariano, and Juan Carlos Nevado. 2003. “Nesting Seabirds in SE Spain: Distribution, Numbers and Trends in the Province of Almería.” *Scientia Marina* 67 (S2): 125–28.

Parker, Hampton Wildman, and F. C. Stott. 1965. “Age, Size and Vertebral Calcification in the Basking Shark, Cetorhinus Maximus (Gunnerus).” *Zoologische Mededelingen* 40 (34): 305–19.

Pascual Torner, Maria. 2016. “Spatio-Temporal Processes Explaining Salp Aggregations in the Catalan Sea, Northwestern Mediterranean.”

Passelaigue, Françoise. 1974. “Etude Comparée de La Croissance de Quelques Poissons Téléostéens Du Golfe de Marseille.”

Pauly. 1990. “Length-Converted Catch Curves and the Seasonal Growth of Fishes.” *Fishbyte* 8 (3): 33–38.

Pauly, D. 1980. “On the Interrelationships between Natural Mortality, Growth Parameters, and Mean Environmental Temperature in 175 Fish Stocks.” *ICES Journal of Marine Science* 39 (2): 175–92. https://doi.org/10.1093/icesjms/39.2.175.

Pauly, D., M. L. D. Palomares, and P. In V. Christensen. 1993. “Improved Construction, Parametrization and Interpretation of Steady-State Ecosystem Models.”

Pauly, D., V. Sambilay Jr, and S. Opitz. 1993. “Estimates of Relative Food Consumption by Fish and Invertebrate Populations, Required for Modelling the Bolinao Reef Ecosystem, Philippines.” In *Trophic Models of Aquatic Ecosystems. V. Christensen and D. Pauly (Eds.) ICLARM Conference Proceedings*, 236–25.

Pauly, Daniel, A. W. Trites, Emily Capuli, and Villy Christensen. 1998. “Diet Composition and Trophic Levels of Marine Mammals.” *ICES Journal of Marine Science* 55 (3): 467–81.

Pavan, G., E. Bernuzzi, B. Cozzi, and M. Podestà. 2013. “La Rete Nazionale Di Monitoraggio Degli Spiaggiamenti Di Mammiferi Marini.” *Biol. Mar. Mediterr* 20 (1): 262–63.

Pellegrini, D., and C. Barghigiani. 1989. “Feeding Behaviour and Mercury Content in Two Flat Fish in the Northern Tyrrhenian Sea.” *Marine Pollution Bulletin* 20 (9): 443–47.

Pettex, Emeline, Léa David, Matthieu Authier, Aurélie Blanck, Ghislain Dorémus, Hélène Falchetto, Sophie Laran, Pascal Monestiez, Olivier Van Canneyt, and Auriane Virgili. 2017. “Using Large Scale Surveys to Investigate Seasonal Variations in Seabird Distribution and Abundance. Part I: The North Western Mediterranean Sea.” *Deep Sea Research Part II: Topical Studies in Oceanography* 141: 74–85.

Pinnegar, JK, NVC Polunin, P Francour, F Badalamenti, R Chemello, M-L Harmelin-Vivien, B Hereu, M Milazzo, M Zabala, and G d’Anna. 2000. “Trophic Cascades in Benthic Marine Ecosystems: Lessons for Fisheries and Protected-Area Management.” *Environmental Conservation* 27 (2): 179–200.

Planas, A., and Francisco Vives. 1952. “Contribucion Al Estudio de La Mollera (Gadus Minutus L.) Del Mediterraneo Occidental (Sectores de Vinaroz e Islas Columbretes).”

Powell, David C. 2003. *A Fascination for Fish: Adventures of an Underwater Pioneer*. Vol. 3. Univ of California Press.

Prats, Léa. 2016. “Etude de La Variabilité Spatiale et Temporelle Dans La Réserve Naturelle Marine de Cerbère-Banyuls et à Proximité : Caractérisation de La Pêche Professionnelle, Étude de l’effet Réserve et Des Espèces à Protéger (Msc Thesis).” Université de Pau et des Pays de L’Adour.

Preuvost, Marine. 2011. “Suivi de La Grande Nacre (Pinna Nobilis) Au Sein de La Réserve Naturelle Marine de Cerbère-Banyuls (MSc Thesis).” Universite de Perpignan Via Dominita.

Quetglas, Antoni, Francesc Alemany, Aina Carbonell, Paolo Merella, and Pilar Sánchez. 1998. “Biology and Fishery of Octopus Vulgaris Cuvier, 1797, Caught by Trawlers in Mallorca (Balearic Sea, Western Mediterranean).” *Fisheries Research* 36 (2–3): 237–49.

Quignard, J. P., and Cl Douchement. 1991. “Alosa Fallax Rhodanensis (Roule 1924).” *The Freshwater Fishes of Europe. Clupeidae, Anguillidae. AULA-Verlag, Wiesbaden* 2: 274–88.

Quignard, M. Girardin et J.-P. 1986. “Croissance de Boops Boops Linné, 1758 (Poissons, Sparidés) Dans Le Golfe Du Lion.” *Journal of Applied Ichthyology* 2 (1): 22–32.

Rau, Pierre Defos du, Karen Bourgeois, Mathieu Thévenet, Lise Ruffino, Sylvain Dromzée, Ridha Ouni, Awatef Abiadh, Roger Estève, Jean-Patrick Durand, and Lorraine Anselme. 2015. “Reassessment of the Size of the Scopoli’s Shearwater Population at Its Main Breeding Site Resulted in a Tenfold Increase: Implications for the Species Conservation.” *Journal of Ornithology* 156 (4): 877–92.

Rodhouse, P. G., and Ch M. Nigmatullin. 1996. “Role as Consumers.” *Phil. Trans. R. Soc. Lond. B* 351 (1343): 1003–22. https://doi.org/10.1098/rstb.1996.0090.

Rodríguez, A. de. 1972. “Alimentación y Comportamiento Alimentario de Los Equinodermos.” *Lagena* 29: 23–31.

Rosas-Luis, Rigoberto, and Pilar Sánchez. 2015. “Food and Feeding Habits of Alloteuthis Media in the Western Mediterranean Sea.” *Marine Biology Research* 11 (4): 438–42.

Rosecchi, Elisabeth, and Yvon Nouaze. 1985. “Comparaison de Cinq Indices Alimentaires Utilisés Dans l’analyse Des Contenus Stomacaux.” *Revue Des Travaux de l’Institut Des Péches Maritimes* 49 (3–4): 111–23.

Rossi, Rossi Heras. 2001. “Environmental Factors Affecting the Trophic Ecology of Benthic Suspension Feeders.”

Sabatés, Ana, Francesc Pages, Dacha Atienza, Verónica Fuentes, Jennifer E. Purcell, and Josep-María Gili. 2010. “Planktonic Cnidarian Distribution and Feeding of Pelagia Noctiluca in the NW Mediterranean Sea.” *Hydrobiologia* 645 (1): 153–65.

Sacanell, M. (2012). "Study on recreational fishing in the Medes Islands marine protected area." Technical Report to the Medes Islands Marine Reserve Management Authority: 52 pp.

Sala, Enric, and Enric Ballesteros. 1997. “Partitioning of Space and Food Resources by Three Fish of the Genus Diplodus (Sparidae) in a Mediterranean Rocky Infralittoral Ecosystem.” *Marine Ecology Progress Series*, 273–83.

Sallami, Balkis, Mohamed Ben Salem, Christian Reynaud, and Christian Capapé. 2014. “Diet of Mediterranean Moray, Muraena Helena (Actinopterygii: Anguilliformes: Muraenidae), from the North-Eastern Tunisian Coast (Central Mediterranean).” *Acta Ichthyologica et Piscatoria* 44 (4): 273.

Sarà, G., S. Vizzini, and A. Mazzola. 2003. “Sources of Carbon and Dietary Habits of New Lessepsian Entry Brachidontes Pharaonis (Bivalvia, Mytilidae) in the Western Mediterranean.” *Marine Biology* 143 (4): 713–22.

Sardà, F. 2000. “Growth Parameters of Deep-Water Decapod Crustaceans in the Northwestern Mediterranean Sea: A Comparative Approach.” *Marine Biology* 136 (1): 79–90.

Schvartz, Thibault, and Mathilde Labbe. 2012. “Suivi à Long Terme Des Communautés Benthiques Des Substrats Durs Dans La Réserve Naturelle Marine de Cerbère-Banyuls.”

Sciara, Giuseppe Notarbartolo di, Giancarlo Lauriano, Nino Pierantonio, Ana Cañadas, Greg Donovan, and Simone Panigada. 2015. “The Devil We Don’t Know: Investigating Habitat and Abundance of Endangered Giant Devil Rays in the North-Western Mediterranean Sea.” *PloS One* 10 (11): e0141189.

Scientific, Technical and Economic Committee for Fisheries (STECF). 2013. “2012 Assessment of Mediterranean Sea Stocks Part II (STECF 13-05). Publications Office of the European Union, Luxembourg, EUR 25309 EN, JRC 81592, 618 Pp.”

Septentrion Environement. 2015. “Etude Des Populations de Corail Rouge Dans La Réserve Naturelle Marine de Cerbère-Banyuls et En Périphérie (Côte Vermeille).”

Šifner, Svjetlana Krstulović, and Nedo Vrgoč. 2009. “Diet and Feeding of the Musky Octopus, Eledone Moschata, in the Northern Adriatic Sea.” *Journal of the Marine Biological Association of the United Kingdom* 89 (2): 413–19.

Sinovčić, Gorenka, Marijana Franičević, Barbara Zorica, and V. Čikeš‐Keč. 2004. “Length–Weight and Length–Length Relationships for 10 Pelagic Fish Species from the Adriatic Sea (Croatia).” *Journal of Applied Ichthyology* 20 (2): 156–58.

Stergiou, K, D. C. Bobori, F. G. Ekmekçi, M. Gökoğlu, P. K. Karachle, G. Minos, Y. Özvarol, Ioanna Salvarina, A. S. Tarkan, and L. Vilizzi. 2014. “New Fisheries-Related Data from the Mediterranean Sea (April 2014).” *Mediterranean Marine Science* 15 (1): 213–24.

Stergiou, K. I., and D. K. Moutopoulos. 2001. “A Review of Length-Weight Relationships of Fishes from Greek Marine Waters.” *Naga, the ICLARM Quarterly* 24 (1–2): 23–39.

Stergiou, K. I., and C. Y. Politou. 1995. “Biological Parameters, Body Length-Weight and Length-Height Relationships for Various Species in Greek Waters.” *Naga, the ICLARM Quarterly* 18 (2): 42–45.

Talmat-Chaouchi, Nora, Mohamed Boukhemza, and Riadh Moulai. 2014. “Comparative Analysis of the Yellow-Legged Gull’s (Larus Michahellis (Naumann, 1840)) Trophic Ecology in Two Colonies of the Central Coast of Algeria.” *Zoology and Ecology* 24 (4): 324–31.

Thibault, Jean-Claude, Richard Zotier, Isabelle Guyot, and Vincent Bretagnolle. 1996. “Recent Trends in Breeding Marine Birds of the Mediterranean Region with Special Reference to Corsica.” *Colonial Waterbirds*, 31–40.

Tičina, Vjekoslav, Olja Vidjak, and Ivo Kačič. 2000. “Feeding of Adult Sprat, Sprattus Sprattus, during Spawning Season in the Adriatic Sea.” *Italian Journal of Zoology* 67 (3): 307–11.

Torres, M. A., F. Ramos, and I. Sobrino. 2012. “Length–Weight Relationships of 76 Fish Species from the Gulf of Cadiz (SW Spain).” *Fisheries Research* 127: 171–75.

Tsimenidis, N. Ch. 1980. “Contribution to the Study of the Angler-Fishes Lophius Budegassa Spinola, 1807 and L. Piscatorius L., 1758 in Greek Seas.” *Institute of Oceanographic and Fisheries Research, Special Publication (4)*, 1–190.

Tsounis, Georgios, Sergio Rossi, Jürgen Laudien, Lorenzo Bramanti, Neus Fernandez, Josep-Maria Gili, and Wolf Arntz. 2006. “Diet and Seasonal Prey Capture Rates in the Mediterranean Red Coral (Corallium Rubrum L.).” *Marine Biology* 149 (2): 313–25.

Tudela, Sergi, and Isabel Palomera. 1997. “Trophic Ecology of the European Anchovy Engraulis Encrasicolus in the Catalan Sea (Northwest Mediterranean).” *Marine Ecology Progress Series*, 121–34.

Tudó, P. (2017). "Unpubl. Data. Directorate of Fishing and Maritime Affairs, Government of Catalonia, Avinguda Diagonal 523-525, 08029 Barcelona, Spain.".

Valle, C., J. T. Bayle, and A. A. Ramos. 2003. “Weight–Length Relationships for Selected Fish Species of the Western Mediterranean Sea.” *Journal of Applied Ichthyology* 19 (4): 261–62.

Valls, Audrey, Didier Gascuel, Sylvie Guénette, and Patrice Francour. 2012. “Modeling Trophic Interactions to Assess the Effects of a Marine Protected Area: Case Study in the NW Mediterranean Sea.” *Marine Ecology Progress Series* 456: 201–14.

Valls, Maria. 2017. “Trophic Ecology in Marine Ecosystems from the Balearic Sea (Western Mediterraniean).” Universitat de les Illes Balears.

Valls, Maria, M. Cabanellas-Reboredo, I. Uranga, and A. Quetglas. 2015. “Feeding Ecology of Two Squid Species from the Western Mediterranean.” *Marine Ecology Progress Series* 531: 207–19.

Van Eerden, M. R., and M. J. Munsterman. 1986. “Importance of the Mediterranean for Wintering Cormorants Phalacrocorax Carbo Sinensis.” In *Mediterranean Marine Avifauna*, 123–41. Springer.

Vasconcelos, Joana, Adriana Alves, Elisabete Gouveia, and Graça Faria. 2006. “Age and Growth of the Blue Jack Mackerel, Trachurus Picturatus Bowdich, 1825 (Pisces: Teleostei) off Madeira Archipelago.”

Velasco, Eva Maria, Juan Del Arbol, Jorge Baro, and Ignacio Sobrino. 2011. “Age and Growth of the Spanish Chub Mackerel Scomber Colias off Southern Spain: A Comparison between Samples from the NE Atlantic and the SW Mediterranean.” *Revista de Biología Marina y Oceanografía* 46 (1): 27–34.

Verlaque, M. 1985. “Note Preliminaire Sur Le Comportement Alimentaire de Sarpa Salpa (L.)(Sparidae) En Méditerranée.” *Rapp. Comm. Int. Mer Médit* 29 (5): 193–96.

Vianet, Régis, J.-P. Quignard, and J.-A. Tomasini. 1989. “Age et Croissance de Quatre Poissons Pleuronectiformes (Flet, Turbot, Barbue, Sole) Du Golfe Du Lion: Évolution de La Structure de La Sagitta.” *Cybium*, no. 3.

Wyche, C. J., and S. E. Shackley. 1986. “The Feeding Ecology of Pleuronectes Platessa L., Limanda Limanda (L.) and Scophthalmus Rhombus (L.) in Carmarthen Bay, South Wales, UK.” *Journal of Fish Biology* 29 (3): 303–11.

Zander, C. D., and J. Berg. 1984. “Feeding Ecology of Littoral Gobiid and Blennioid Fishes of the Banyuls Area (Mediterranean Sea). 2. Prey Selection and Size Preference [Pomatoschistus Bathi, Gobius Auratus, Buenia Jeffreysi, Deltentosteus Quadrimaculatus, Tripterygion Delaisi Xanthosoma, Parablennius Rouxi, Parablennius Gattorugine].” *Vie et Milieu (France)*.

Zavodnik, Nevenka. 1969. “Studies on the Life History of Adriatic Sprat.”

Zotier, Richard, Vincent Bretagnolle, and Jean-Claude Thibault. 1999. “Biogeography of the Marine Birds of a Confined Sea, the Mediterranean.” *Journal of Biogeography* 26 (2): 297–313.

Zupa, R, T Silecchia, P Carbonara, and M T Spedicato. 2006. “Growth of Trachurus Mediterraneus (Steindachner, 1868) in the Central-Southern Tyyrhenian Sea. Biol. Mar. Medit. 13(2):302-303.”