|  |  |  |  |
| --- | --- | --- | --- |
| **Functional Groups** | **Original value** | **Calibrated value** | **Sources** |
| **Dolphins** |
| Biomass | 0.05 | 0.03  | Moiseev (1969) c.f. Ivanov & Beverton (1985) |
| P/B | 0.35 | 0.35 | Moiseev (1969) c.f. Ivanov & Beverton (1985) |
| Q/B | 17.05 | 17.05 | Empirical equation Innes et al. (1987) using average weights from Ivanov & Beverton (1985) |
| Diet | Santos et al. (2001), Börjesson, Berggren & Ganning (2003), Pierrepont et al. (2005) |
| **Atlantic bonito** |
| Biomass | 0.0593 | 0.0593 | Ivanov & Beverton (1985) assuming a median biomass value |
| P/B | 0.825 | 0.825 | Z = F + M; hence, empirical equation for M by Pauly (1980) using length-weight relationship and L∞ from Kahraman et al. (2014), F from Daskalov et al. (2020) |
| Q/B | 7.549 | 7.549 | Empirical equation by Palomares & Pauly (1998) using length-weight relationship and L∞ from Kahraman et al. (2014) |
| Diet | Genç, Başçınar & Dağtekin (2019) |
| **Bluefish** |
| Biomass | 0.0124 | 0.0149 | Ivanov & Beverton (1985) assuming a biomass about quintuple of average catch in the 1960s |
| P/B | 0.960 | 0.960 | Akyol & Ceyhan (2007) |
| Q/B | 5.109 | 5.109 | Empirical equation by Palomares & Pauly (1998) using length-weight relationship from Kalaycı et al. (2007) and L∞ from Ceyhan et al. (2007) |
| Diet | Bal, Yanik & Türker (2020) |
| **Atlantic mackerel** |
| Biomass | 0.0201 | 0.0201 | Prodanov et al. (1997) |
| P/B | 1.425 | 1.425 | Prodanov et al. (1997) |
| Q/B | 8.665 | 8.665 | Empirical equation by Palomares & Pauly (1998) using length-weight and L∞ parameters from Bal & Türker (2019) |
| Diet | Greenstreet (1996) c.f. Froese & Pauly (2023) |
| **Whiting** |
| Biomass | 0.223 | 0.223 | Prodanov et al. (1997) |
| P/B | 0.915 | 0.915 | Prodanov et al. (1997) |
| Q/B | 5.072 | 5.072 | Empirical equation by Palomares & Pauly (1998) using W∞ from Prodanov (1980) |
| Diet | Mazlum & Bilgin (2014) |
| **Turbot** |
| Biomass | 0.0162 | 0.0162 | Prodanov et al. (1997) |
| P/B | 0.551 | 0.551 | Prodanov et al. (1997) |
| Q/B | 2.759 | 2.759 | Empirical equation by Palomares & Pauly (1998) using length-weight relationship from Samsun, Kalaycı & Samsun (2007) and L∞ from Özdemir, Erdem & Sümer (2006) |
| Diet | Zengin (2000) |
| **Red mullet** |
| Biomass | 0.0034 | 0.013 | Calculated using median F values from Kasapoğlu (2018), Aydın & Karadurmuş (2013) and catch value from Ivanov & Beverton (1985) |
| P/B | 1.66 | 1.66 | Kasapoğlu (2018) |
| Q/B | 7.245 | 7.245 | Empirical equation by Palomares & Pauly (1998) using length-weight and L∞ from Kasapoğlu (2018) |
| Diet | Onay & Dalgic (2019) |
| **Spiny dogfish** |
| Biomass | 0.0587 | 0.0587 | Prodanov et al. (1997) |
| P/B | 0.164 | 0.164 | Prodanov et al. (1997) |
| Q/B | 2.872 | 2.872 | Empirical equation by Palomares & Pauly (1998) using W∞ from Avsar (2001) |
| Diet | Demirhan, Seyhan & Basusta (2007) |
| **Mediterranean horse mackerel** |
| Biomass | 0.191 | 0.191 | Prodanov et al. (1997) |
| P/B | 1.712 | 1.712 | Samsun, Akyol & Ceyhan (2018) |
| Q/B | 7.375 | 7.375 | Empirical equation Palomares & Pauly (1998) using length-weight relationship and L∞ from Kasapoğlu (2018) |
| Diet | Georgieva et al. (2019) |
| **Pontic shad** |
| Biomass | 0.00815 | 0.00815 | Prodanov et al. (1997) |
| P/B | 1.28 | 1.28 | Özdemir et al. (2018) |
| Q/B | 6.4 | 6.4 | Empirical equation by Palomares & Pauly (1998) using length-weight relationship and L∞ from Özdemir et al. (2018) |
| Diet | Mazlum & Akgumus (2019) |
| **Sprat** |
| Biomass | 0.296 | 0.412 | Prodanov et al. (1997) |
| P/B | 1.7 | 1.7 | Prodanov et al. (1997) |
| Q/B | 10.58 | 10.58 | Empirical equation by Palomares & Pauly (1998) using length-weight relationship from Satilmis et al. (2014) and L∞ from Stoyanov (1965) |
| Diet | Bayhan & Sever (2015) |
| **Anchovy 1,1+** |
| Biomass | 0.597 | 0.597 | Prodanov et al. (1997) |
| P/B | 1.807 | 1.807 | Z = F + M; hence, F from Prodanov et al. (1997) and M from Ivanov & Beverton (1985) |
| Q/B | 9.249 | 9.249 | Empirical equation by Palomares & Pauly (1998) using length-weight relationship from Satilmis et al. (2014) and L∞ from Karacam & Düzgünes (1990) |
| Diet | Bulgakova (1996) |
| **Anchovy 0,0+** |
| Biomass | - | - | Estimated by Ecopath |
| P/B | 6.44 | 6.44 | Oguz, Salihoglu & Fach (2008) |
| Q/B | - | - | Estimated by Ecopath |
| Diet |  |  | Bulgakova (1996) |
| K | 0.324 | 0.324 | Karacam & Düzgünes (1990) |
| Wmaturity/W∞ | 0.135 | 0.135 | Calculated based on W∞ from Karacam & Düzgünes (1990)and L50 from Samsun, Samsun & Karamollaoğlu (2004) |
| **Benthic invertebrates** |
| Biomass | 0.75 | 0.75 | Ivanov & Beverton (1985) |
| P/B | 2.5 | 2.5 | Moiseev (1969) c.f. Ivanov & Beverton (1985) |
| Q/B | 22.99 | 22.99 | Calculated using temperature correction factor as per Opitz (1996) using the deep-basin averaged sea surface temperature of 15°C between 1960-1999 that was adjusted considering model’s overestimation with comparison to Pathfinder data (Miladinova et al., 2017) |
| Diet | Tsagarakis et al. (2010) |
| **Aurelia** |
| Biomass | 0.0684 | 0.0484 | Shiganova et al. (2008) |
| P/B | 10.95 | 10.95 | Daskalov (2002) |
| Q/B | 34.76 | 34.76 | based on P/Q (0.315) by Olesen, Frandsen & Riisgård (1994) |
| Diet | Anninsky et al. (2020) |
| ***Beroe ovata*** |
| Biomass | - | - | None in 1960 |
| P/B | 11.72 | 11.72 | Based on P/Q = 0.3 by Finenko et al. (2003) |
| Q/B | 39.05 | 39.05 | Kideys et al. (2004) |
| Diet | Kamburska (2004), Berdnikov et al. (1999) |
| ***Mnemiopsis leidyi*** |
| Biomass | - | - | None in 1960 |
| P/B | 20.1 | 20.1 | Shiganova et al. (2018) |
| Q/B | 55.68 | 55.68 | Based on P/Q = 0.361 by Reeve, Syms & Kremer (1989) |
| Diet | Mutlu (1999) |
| ***Pleurobrachia pileus*** |
| Biomass | 0.01 | 0.01 | Shiganova et al. (2008) |
| P/B | 10.95 | 10.95 | Daskalov (2002) |
| Q/B | 29.2 | 29.2 | Daskalov (2002) |
| Diet | Mazlum et al. (2018) |
| ***Noctiluca scintillans*** |
| Biomass | 0.09 | 0.11 | Daskalov (2002) |
| P/B | 7.3 | 7.3 | Greze (1979) |
| Q/B | 36.2 | 36.2 | Daskalov (2002) |
| Diet | Berdnikov (1999) |
| **Zooplankton** |
| Biomass | 0.4 | 0.4 | Shiganova et al. (2008) |
| P/B | 30 | 38 | Datzko (1954) and Vodyanitzki (1956) c.f. Ivanov & Beverton (1985) |
| Q/B | 152 | 152 | Based on P/Q = 0.25 from Straile (1997) |
| Diet | Daskalov (2002) |
| **Phytoplankton** |
| Biomass | 0.25 | 0.6 | Yunev (2011) |
| P/B | 252 | 105 | Calculated to match 63+-18 gC/m2/y annual primary production as per (Yunev, 2011) |
| **Detritus** |
| Biomass | 5.926 | 5.926 | Empirical equation by Pauly et al. (1993) using 63 gC/m2/y primary production from Yunev (2011) and euphotic zone depth of 50 m (Zenkevitch, 1963) |

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