#### **Table S1.** Surveys collated to assess diadromous fish presence (modified from Elliott et al., 2021). Gear acronyms within Table S3. MIK = Midwater Ringnet, FKN = Fyke net. NA = No information given.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Survey category** | **Full name (where available)**  | **Survey acronym** | **Gear acronym** | **Geographical region**  | **Years**  | **Source** |
| ICES DATRAS[[1]](#footnote-1) | Bottom Trawl Survey | BTS | TBB  | Greater North Sea and Celtic Sea | 1987 - 2018 | DOI:10.7489/1967-1  |
|  | Bottom Trawl Survey | BTS-VIII | TBB | Bay of Biscay | 2011-2017 | http://datras.ices.dk |
|  | Demersal Young Fish Survey | DYFS | TBB  | Greater North Sea  | 2002-2017 | http://datras.ices.dk |
|  | Evaluation Halieutique Ouest de l’Europe | EVHOE | OTB  | Celtic sea and Bay of Biscay | 1997-2017 | 10.7489/1958-1 Not |
|  | French Channel Ground Fish Survey | FR-CGFS | OTB  | Eastern English Channel | 1988-2018 | DOI: 10.18142/11 |
|  | North Sea International Bottom Trawl Survey | NS-IBTS | OTB  | Greater North Sea | 1965-2018 | DOI: 10.7489/1922-1 |
|  | Portuguese International Bottom Trawl Survey | PT-IBTS | OTB  | Bay of Biscay and the Iberian coast | 2002-2017 | DOI: 10.7489/1963-1  |
|  | Scottish West Coast Bottom Trawl Survey | SWC-IBTS | OTB  | Celtic sea  | 1985-2010 | DOI: 10.7489/1957-1 DOI: 10.7489/1924-1 |
| French scientific surveys  |  | Arca | TBB  | Bay of Biscay | 1995, 1996 | Ifremer |
|  | Arca | GN | Bay of Biscay | 1996 |  |
|  | Arca | FKN  | Bay of Biscay | 1995 |  |
| Nourriceries démersaux | Nourdem Bargip/ | OTB | Channel and Bay of Biscay (Loire and Seine) | 2015-2018 | DOI: 10.18142/315 |
| Etude de l'impact des marées noires de l'Erika | Black | OTB  | Bay of Biscay | 2000 | DOI: 10.17600/50150 |
|  | Black | TBB | Bay of Biscay | 2000 |  |
| Nurse (nourriceries) sur la Baie du mont Saint-Michel | BMSM2003 | TBB  | Bay of Biscay | 2003 | Ifremer |
| Nurse (nourriceries) sur la baie de Bourgneuf | Bour | TBB  | Bay of Biscay | 1980-1984 | Ifremer |
| CAmpagne MANche OCcidentale pluridisciplinaire | CAMANOC  | OTB | English Channel | 2014 | DOI: 10.17600/14001900 |
| Campagne de comparaison de racasseurs lourds et legers sur la sélectivité des soles | Captusol01 | TBB  | Bay of Biscay | 1984 | Ifremer |
| CLASS 2008 | CLA08\_ | OTM | Bay of Biscay | 2008 | DOI: 10.17600/8040050 |
|  |  | MIK | Bay of Biscay | 2008 |  |
|  Analyse des peuplements de crépidules en baie de bourgneuf | CREBOUR | TBB  | Bay of Biscay | 2006 | DOI: 10.17600/6050020 |
| EPIfaune BENthique du GOlfe du Lion | EPIBENGOL | OTB | Mediterranean | 2018 | DOI: 10.17600/18000589 |
|  | Giro | TBB  | Western English Channel | 1997 | Ifremer |
|  Campagne sur les gradients de production côte-large incluant la baie de Vilaine et la rade de Brest | Isobaie09 | OTB | Bay of Biscay | 2009 | Ifremer |
|  | Isobaie09 | FKN | Bay of Biscay | 2009 |  |
|  | Isobaie09 | NA | Bay of Biscay | 2009 |  |
|  Nurse (nourriceries) en estuaire externe de la Loire | Loir | TBB  | Bay of Biscay | 1980-1986 | Ifremer |
|  | Marika | TBB | Bay of Biscay | 2005 | Ifremer |
| Mediterranean trawl survey - Corse | MEDITS-CORSE | OTB | Mediterranean | 1994-2017 | http://www.ifremer.fr/SIH-indices-campagnes/ |
| Mediterranean trawl survey – Golfe du Lion | MEDITS-LION | OTB | Mediterranean | 1994-2018 | http://www.ifremer.fr/SIH-indices-campagnes/ |
| Nurse (nourriceries) en 2003 | MISOLRE | OTB | Bay of Biscay | 2003 | DOI:10.17600/3050120 |
|  | MISOLRE | TBB | Bay of Biscay | 2003 |  |
| Nurse (nourriceries) dans le golfe du Morbihan | Morb | TBB  | Bay of Biscay | 1995-1996 | Ifremer |
| Nurse (nourriceries) dans le pertuis breton | Nonamebreton | TBB  | Bay of Biscay | 1987 | Ifremer |
| Nurse (nourriceries) dans la Vilaine | Nonamvillaine | TBB  | Bay of Biscay | 1996 | Ifremer |
| Nourriceries en Méditerranée | NOURMED | TBB | Mediterranean | 2018 | DOI: 10.17600/18000588 |
|  | Nourriceries Baie de Somme | NOURSOM | TBB | Channel | 1987-2018 | DOI: [10.18142/22/](https://sextant.ifremer.fr/record/98ac17c5-8d70-455e-9496-aafb0dd4ae17/) |
|  | Nourriceries golfe de Gascogne | Nurse | TBB  | Bay of Biscay | 1981-2016 | Ifremer |
|  |  | Nurse | OTB | Bay of Biscay | 2000-2002,2008-2009 |  |
|  |  | Nurse | NA | Bay of Biscay | 2009 |  |
|  |  | Nurse | GN | Bay of Biscay | 2013 |  |
|  | Nurse (nourriceries) dans la Vilaine | Nurvil | TBB  | Bay of Biscay | 2004-2005 | Ifremer |
|  |  | Nurvil | OTB | Bay of Biscay | 2005 |  |
|  |  | Peco/PECOS  | OTB  | Bay of Biscay and Western English Channel | 1976-19802004-2006 | Ifremer |
|  |  | Peco/PECOS  | TBB  | Bay of Biscay and Western English Channel | 1980, 2004 |  |
|  | Pélagiques Gascogne | PELGAS | OTM | Bay of Biscay | 2000-2018 | DOI: 10.17882/59809 |
|  |  | PELGAS | PS | Bay of Biscay | 2007-2011 |  |
|  |  | PELGAS | PTM | Bay of Biscay | 2007-2018 |  |
|  | Nurse (nourriceries) dans les pertuis (breton et antioche) | Pertuis | TBB  | Bay of Biscay | 1986-1987 | Ifremer |
|  | Campagnes pour la compréhension des communautés sur les habitats à Haploops | Ploops | TBB  | Bay of Biscay | 2009-2010 | Ifremer |
|  |  | RESSGASC | OTB  | Bay of Biscay | 1984-2002 | Ifremer |
|  | Nurse (nourriceries) en baie de Vilaine mais en hiver (winter) | RetroB | TBB  | Bay of Biscay  | 2008 | Ifremer |
|  | Suivi des Effets bioLogIques de la contamination chimique en Méditerranée | SELIMED-1 | OTB | Mediterranean | 2016 | DOI: 10.17600/16011900 |
|  |  Répartition de la distribution des soles sur la radiale cote-large de la baie de Vilaine | Sold | OTB  | Bay of Biscay | 1988-1989 | DOI:10.17600/88011211 |
|   |   | Typo | OTB  | Bay of Biscay | 1996 | Ifremer |
|  |  | Typo | TBB | Bay of Biscay | 1997-1997 |  |
| Fisheries-dependent data | French fisheries observer data | ObsMer | Refer to Table S3 | Greater North Sea, Celtic Sea, Bay of Biscay | 2003-2019 | DOI: 10.13155/39722 |

#### **Table S2.** Gear types, acronyms, and their gear category. For more detail refer to Table S1.

|  |  |  |
| --- | --- | --- |
| **Gear category**  | **Gear acronym** | **Gear type** |
| Benthic mobile | DRB | Boat dredges |
| Pots | FPO | Pots |
| Static net | GEN | Gillnet and entangling net |
| Static net | GN | Gillnet |
| Pelagic mobile | GNC | Encircling gillnet |
| Static net | GND | Driftnet |
| Static net | GNE | Set gillnet  |
| Static net | GNS  | Set gillnet (anchored) |
| Static net | GTN | Combined gillnets-trammel nets |
| Static net | GTR  | Trammel net |
| Line | LH | Handline |
| Line | LHM | Han and pole lines (mechanised) |
| Line | LHP | Hand lines and pole-lines (hand operated) |
| Line | LL | Longlines |
| Line | LLD | Drift longline |
| Line | LLF | Fixed floating longline |
| Line | LLS  | Set longline |
| Line | LTL | Trolling lines |
| Line | LTS | Surface longline |
| Line | LVS | Vertical longline |
| Demersal mobile | OTB  | Otter beam trawl |
| Pelagic mobile | OTM  | Otter midwater trawl |
| Demersal mobile | OTT  | Otter twin trawl |
| Pelagic mobile | PS | Purse seine |
| Demersal mobile | PTB  | Bottom pair trawl |
| Pelagic mobile | PTM  | Midwater pair trawl |
| Demersal mobile | PTT | Demersal pair trawl |
| Demersal mobile | SDN  | Danish seine net |
| Pelagic mobile | SPR | Vessel pair seine |
| Demersal mobile | SSC  | Scottish seine net |
| Benthic mobile | TBB  | Bottom beam trawl |

1. [↑](#footnote-ref-1)