EFH Project - Fish survey datasets

Dataset name (Excel format):

7.MEGS 2010-19-ICES

Dataset name (subsets in CSV format):

7.MEGS 2010-19-ICESa (haul data)

7.MEGS 2010-19-ICESb (catch data)

Content description:

Dataset of fish catch data from ICES-coordinated Mackerel and Horse Mackerel Egg Survey (MEGS; broad scale, standardised sampling with Bongo or ‘Gulf type high-speed’ samplers, with national variants) undertaken by different countries in the Northeast Atlantic (quarters Q1, Q2 and Q3 available). The dataset is an extract of the ICES online database, combining data on haul characteristics (subset a) and and egg count (egg count by species by egg stage) for Mackerel (subset b), with selection of survey events within the period 2010-2020 and survey locations within/around UK waters (Latitude between 49(incl) to 62(excl) degN; Longitude between -16(incl) to 5(excl) degE).

Additional selection criteria upon extraction from the ICES database are indicated below:

Haul data (subset a): Hauls with problems highlighted in 'Notes' (clogging, nose cone issue, problem with flowmeter) excluded; Hauls with FlowEfficiency <1 excluded; Hauls with NetClogging different from 0 or Blank (i.e. values of 1 and 2) excluded; VolumeFiltInt = 0 excluded (volume of filtered water based on reading of internal flowmeter).

Egg catch data (subset b): Mackerel eggs only (Species = "Scomber scombrus") selected; Early stage eggs only (DevStage = 1, 1a or 1b) selected.

Dataset structure:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Column Heading | Description | Variable type | Unit/categories (incl. NA where no data) | Source | Subset |
| ICES\_FileID | For MEGS dataset only: File ID from ICES database | Categorical (nominal) | (codes and explanations from ICES vocabularies - https://vocab.ices.dk/) | Original survey dataset | ab |
| ICES\_HaulID | For MEGS dataset only: Haul ID from ICES database | Categorical (nominal) | (codes and explanations from ICES vocabularies - https://vocab.ices.dk/) | Original survey dataset | ab |
| ICES\_MeasurementID | For MEGS dataset only: Measurement ID from ICES database | Categorical (nominal) | (codes and explanations from ICES vocabularies - https://vocab.ices.dk/) | Original survey dataset | b |
| RecordType | For MEGS dataset only: Record type from ICES database | Categorical (nominal) | (codes and explanations from ICES vocabularies - https://vocab.ices.dk/) | Original survey dataset | ab |
| Survey | Survey code | Categorical (nominal) | BTS; EVHOE, IE-IGFS, NS-IBTS, SCOROC, SCOWCGFS; MEGS (codes and explanations from ICES vocabularies - https://vocab.ices.dk/); East Coast, West Coast (of Scotland; from sandeel dredge survey) | Original survey dataset | a |
| Country | Country code (for ICES surveys only) | Categorical (nominal) | BE, DE, DK, FR, FO, GB, GB-SCT, IS, IE, NL, NO (codes and explanations from ICES vocabularies - https://vocab.ices.dk/) | Original survey dataset | a |
| Ship | Ship code (for ICES surveys only) | Categorical (nominal) | (codes and explanations from ICES vocabularies - https://vocab.ices.dk/) | Original survey dataset | a |
| HaulNo (or HaulID, or Haul) | Haul identification number/code (as allocated in original survey dataset) | Categorical (nominal) | - | Original survey dataset | ab |
| Gear | Sampling gear | Categorical (nominal) | BT4A, BT4AI, BT4S, BT7, BT8; GOV; BGN60, Gulf7, NACKTHAI (codes and explanations from ICES vocabularies - https://vocab.ices.dk/); DREDGE (sandeel survey) | Original survey dataset | a |
| ShootLong (or StartLongitude, or Dec lat shoot) | Haul location (shooting point), latitude (WGS 1984) | Numeric (continuous) | deg N | Original survey dataset | a |
| ShootLat (or StartLatitude, or Dec long shoot) | Haul location (shooting point), longitude (WGS 1984) | Numeric (continuous) | deg E | Original survey dataset | a |
| Year | Haul event, Year; derived from Date | Numeric (discrete) | Year | Derived from original survey dataset | a |
| Month | Haul event, Month; derived from Date | Numeric (discrete) | Month number (1-12) | Derived from original survey dataset | a |
| Day | Haul event, Day; derived from Date | Numeric (discrete) | Day number (1-31) | Derived from original survey dataset | a |
| Hour | Haul event, Hour | Numeric (discrete) | Hour number (0-24) | Original survey dataset | a |
| Minute | Haul event, Minute | Numeric (discrete) | Minute number (0-59) | Original survey dataset | a |
| HaulDurationMinutes (or HaulDur) | Haul event, duration (minutes component) | Numeric (discrete) | minutes | Original survey dataset | a |
| HaulDurationSeconds | Haul event, duration (seconds component) | Numeric (discrete) | seconds | Original survey dataset | a |
| Distance (or Distance towed) | Haul, distance towed | Numeric (discrete) | meters (m) | Original survey dataset | a |
| VolumeFiltInt | Volume of filtered water based on reading of internal flowmeter | Numeric (discrete) | na | Original survey dataset | a |
| Species | Species latin name | Categorical (nominal) | [species latin name] | Original survey dataset | b |
| DevStage | Egg developmental stage | Categorical (nominal) | 1, 1a, 1b | Original survey dataset | b |
| Number | Egg count (by species by egg stage) | Numeric (discrete) | number of eggs | Original survey dataset | b |
| SubFactor | Raising factor for 'Number', accounting for subsampling | Numeric (continuous) | - | Original survey dataset | b |
| Count\_corr | Number of eggs in the sample, cal;culated as 'Number' x 'SubFactor' to raise numbers of eggs counted from subsample to sample | Numeric (continuous) | number of eggs | - | b |