**InterCatch Input File Generator V3 (InterCatch Filemaker)**

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**Introduction**

The InterCatch Filemaker application was developed to convert national catch and sampling data from the traditional Exchange format Excel Spreadsheet (known as the Exchange Format) into comma separated files suitable for upload to the InterCatch system (<http://www.ices.dk/intercatch>).

**The NEA Mackerel Exchange Format & InterCatch**

National catch and sampling data for NEA Mackerel has traditionally been recorded and distributed as Excel files, known as the ‘Exchange Format’. Each country creates a copy of the exchange format into which they enter the data for a particular year. This file is usually forwarded to the Stock Coordinator who will use it as a basis for working group preparation. The filemaker application was developed as a utility to help national data submitters and stock coordinators create the necessary files for the upload of the information contained on the exchange format to the InterCatch application.

A blank copy of the NEA Mackerel exchange format is included with this installation (BlankExchange.xls). Also included is Exchange4InterCatch.xls which can also be used in the preparation of data. It contains only the essential elements of the original format necessary for the filemaker to generate the InterCatch files. It contains templates for both age and length-structured data. To use this file, create a new worksheet for each year/area/fleet/species combination.

**Assumptions**

The files generated conform to version 1.3 of the InterCatch exchange format.

The software does not perform any data manipulation, it simply reformats the data. Updates to the data can be made using the Filemaker. However, these changes will only be applied to the output (InterCatch files). No updates are made to the original input files.

The mandatory fields on the Exchange Format are assumed to be populated.

The application performs no error checking.

Worksheets in the Exchange Format whose names start with “CANUM” are included in the translation and are assumed to correspond to data from a single fishing area and fleet.

For each worksheet an InterCatch header record (HI) and a species record (SI) will be generated. If sampling data is available a set of species detail (SD) records will be generated.

Where applicable, the values used for the InterCatch fields are taken directly from the corresponding Exchange Format spreadsheet cell value. However, there are several fields where the values must be input by the user. Default values are assumed which can be changed by selecting an appropriate value from the drop down box. Tables 1 to 3 describe the mapping between the formats.

Table 1: Header Record Information

|  |  |
| --- | --- |
| InterCatch Field | source |
| RecordType | ‘HI’ |
| Country | Code derived from value in cell C4 |
| Year | Taken from cell C6 |
| SeasonType | ‘Quarter’,’Month’,’Year’ |
| Season | Year, month or quarter number |
| Fleet | Taken from cell I5 |
| AreaType | Derived from area value in cell I4 |
| FishingArea | Taken from cell I4 |
| UnitEffort | NA |
| Effort | -9 |
| AreaQualifier | NA |

Table 2: Species Information Record

|  |  |
| --- | --- |
| InterCatch Field | source |
| RecordType | ‘SI’ |
| Country | As in HI record |
| Year | As in HI record |
| SeasonType | As in HI record |
| Season | As in HI record |
| Fleet | As in HI record |
| AreaType | As in HI record |
| FishingArea | As in HI record |
| DepthRange | ‘NA’ |
| Species | FAO code derived from value in cell C5 |
| Stock | ‘NA’ |
| CatchCategory | Defaults to C (Catch). Can be updated. |
| ReportingCategory | Defaults to A (All). Can be updated. |
| DataToFrom | ‘NA’ |
| Usage | ‘H’ |
| SamplesOrigin | ‘U’ |
| QualityFlag | ‘NA’ |
| UnitCATON | Defaults to kg. Can be updated. |
| CATON\* | Taken from cell D35,G35,J35,M35,… |
| OffLandings\* | Taken from D30,G30,J30,M30,… |
| varCATON | -9 |
| InfoFleet | Taken from cell D45,G45,J45,M45,.. Can be updated |
| InfoStockCoordinator | Taken from cell D46,G46,J46,M46,.. Can be updated |
| InfoGeneral | Taken from cell D47,G47,J47,M47,.. Can be updated |

Table 3: Species Data Records

|  |  |
| --- | --- |
| InterCatch Field | source |
| RecordType | ‘SD’ |
| Country | As in SI record |
| Year | As in SI record |
| SeasonType | As in SI record |
| Season | As in SI record |
| Fleet | As in SI record |
| AreaType | As in SI record |
| FishingArea | As in SI record |
| DepthRange | As in SI record |
| Species | As in SI record |
| Stock | As in SI record |
| CatchCategory | As in SI record |
| ReportingCategory | As in SI record |
| Sex | ‘N’,’F’ or ‘M’. Can be updated |
| CANUMtype | ‘age’ or ‘lngt’. Can be updated |
| AgeLength | From cells B12 to B.. |
| PlusGroup | Defaults to oldest age with data. Can be updated. |
| SampledCatch\* | Value from cell D34,G34,J34,M34,… |
| NumSamplesLngt\* | From cell D39,G39,J39,M39,… |
| NumLngtMeas\* | From cell D40,G40,J40,M40,… |
| NumSamplesAge\* | From cell D39,G39,J39,M39,… |
| NumAgeMeas\* | From cell D41,G41,J41,M41,… |
| unitMeanWeight | Defaults to kg. Can be updated. |
| unitCANUM | Defaults to k. Can be updated. |
| unitAgeOrLength | cm,mm,wr or year. Can be updated |
| unitMeanLength | Defaults to cm. Can be updated |
| Maturity | ‘NA’ |
| NumberCaught | From cells C12-C.., F12-F.., I12-I.., L12-L.. |
| MeanWeight | From cells E12-E.., H12-H.., K12-K.., N12-N..  |
| MeanLength | From cells D12-D.., G12-G.., J12-J.., M12-M.. |
| varNumLanded | -9 |
| varWgtLanded | -9 |
| varLgtLanded | -9 |

\* - if additional age groups are included (i.e. more than the default 15) then these cell references are incorrect. The application will select the appropriate value.

**Installing the software**

Run the Setup.exe application. The installation program will guide you through the process.

**Running the software**

1. Start the application (InterCatch Filemaker.exe)
2. Select the Exchange Format sheet either by browsing (select Browse button) for the file or entering the path and filename directly.
3. Click on ‘Load Data’ to load the Exchange Format data. All the available data will be loaded. Each line corresponds to an Area/Season combination. By default all lines are selected for output (via the check box). Users can uncheck any records they do not wish to be output.
4. The following data is displayed for each Area/Season
	* Sheet – this corresponds to the exchange for worksheet name. It is displayed for information only
	* Area Type – this is derived from the Area as entered in cell I4 of the worksheet. The value can be updated to one of AreaTop, Div, StatRec, SubArea and SubDiv via the Area Type drop down.
	* Area – this corresponds to the Area as entered in cell I4 of the worksheet. The value can be updated using the Area drop down. The available values are displayed upon selection of the Area Type.
	* Season – derived from the exchange format worksheet.
	* Official catch (t) – the official catch as entered in cell D30, G30, J30, M30
	* Unallocated catch (t) – the unallocated catch as entered in cell D31, G31, J31, M31
	* Area-Misreported catch (t) – misreported catch as entered in cell D32, G32, J32, M32
	* Discards (t) – discards as entered in cell D33, G33,J33,M33
	* Sampled Catch (t) – sampled catch as entered in cell D34,G34,J34,M34
	* WG Catch (t) – working group catch as entered in cell D35, G35, J35 M35
	* Sex – not traditionally stored on the spreadsheet. Can be updated using the filemaker.
	* Fleet – Fleet name as entered in cell I5.
	* Catch Cat – catch category. Assumed as catch (C) but can be updated to Discards (D) or Landings (L) via the Catch Category drop down.
	* Report Cat – reporting category. Assumed as All (A) but can be updated to misreported (M), non-reported (N), reported (R), reported and mis-reported (RM), reported and non-reported (RN) or SOP corrections (S) via the Reporting Category drop down.
	* CANUM Type – age or length, as given in cell B11.
	* Unit CATON – the units for the CATON figures. Assumed to be tons (t) but may also be changed to kg (via drop down Unit CATON).
	* Unit Mean Weight – unit for mean weights (sampled catches only). Can be kg or g and updated via drop down.
	* Unit CANUM – unit for catch numbers (sampled catches only). Can be k-thousands (default), m-millions or n-numbers and updated via drop down.
	* Unit Mean Length – unit for mean lengths (sampled catches only). Can be cm, mm, winter rings or ‘na’ and updated via drop down.
	* Oldest – the oldest age (for sampled catches)
	* PlusG – the plus group. Can be updated using up/down control.
	* Caton – the catch to be used in the output. Can be working group catch (WG), official catch (OC) or discards (DISC). The default value is WG.
5. To update any of the available fields select the appropriate record and update the values using the series of drop down boxes at the bottom of the screen. The Catch Category, Reporting Category, Caton, Unit Caton, Area Type and Area fields can be updated for any of the records. Sex, Unit Mean Weight, Unit Canum, Unit Mean Length and Plus Group can only be changed for records that include sample information.
6. Several records can be updated at once, except for the plus group and text information fields.
7. When data from several ages is to be combined into a Plus Group (i.e. the Plus Group is less that the Oldest age) the numbers are simply aggregated whereas weighted mean lengths and weights are calculated (weighted by the numbers at age).
8. If more age/length groups are required, users can modify the exchange spreadsheets to include them. The application uses the spreadsheet cell containing the text “+group-->” to identify the final age group.
9. When any necessary updates have been made and the appropriate lines for output have been selected, save the data in InterCatch format by clicking on the ‘Output Data’ button.
10. Further translations can be carried out by browsing for the appropriate file and loading the data.
11. The sample data for any record can be viewed by clicking the ‘Detail’ button. This information presented is for information only can cannot be updated.
12. Close the application using the ‘Exit’ button.

**Disclaimer**

This software is provided with no guarantees regarding its operation, the quality of the output or the availability of support. It has been developed using data for a single stock and has not been extensively tested otherwise. Feedback is welcomed at andrew.campbell@marine.ie.