**Supplementary Material 2: Barents Sea Cod Diet Database Information**

Data records: Each line in the data file represents a single prey item. The first columns (1-12) describe predator information. From column 13 (Prey) onwards, prey information is described for each prey item in said predator. If multiple prey items were found in the stomach of one predator, predator information (columns 1-12) are repeated for each individual prey. If a cod stomach was empty, “Empty” is detailed in the “Prey” column, and thus only predator information is available for those entries. Data columns 4 (Ship Code), 9 (Fish\_Weight\_kg), 10 (Age\_y), 11 (Deg\_Stomach\_Fullness) and 12 (Sex) only relate to IMR-PINRO data (Norway and Russia). Columns 23 and 24 (No\_of­\_Stomachs and Pooled) relate only to CEFAS (U.K) data, all other columns relate to both components (IMR-PINRO & CEFAS) of the dataset.

Table 1. Information for each data column.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Information** | **Units** |
| Data\_ID | |  | | --- | | Details whether the data is from either the IMR-PINRO joint database or CEFAS | | - |
| Ser\_No\_Fish | Serial number for each individual fish | - |
| Country | Country code denoting either:  58: Norway (IMR-PINRO Database)  U.K: CEFAS Data | - |
| Ship\_kode | Ship identification code | - |
| Year |  |  |
| Month |  |  |
| Day |  |  |
| Fish\_Length\_cm | Total length | cm |
| Fish\_Weight\_kg | Wet weight | kg |
| Age\_y |  | Years |
| Deg\_stomach\_fullness | Degree of stomach fullness. | - |
| Sex | Sex codes:  Not known: Blank  Female: 1  Male: 2  Intersex, transitional animals: 3  Interracial: 4  Reference: Mjanger et al 2016. | - |
| Prey | Prey: denotes prey, Empty: represents empty stomachs | - |
| Prey\_weight | Wet weight | g |
| Deg\_digestion | Degree of digestion codes:  Blank: Not observed  1: Digestion not started, the stomach content seems fresh  2: Digestion commenced  3: Digestion progressed; the species can no longer be identified. But one can separate systematic groups  4: Digestion far advanced, one can still find eyes and bigger pieces of prey in the stomach content  5: Digestion almost completed, the stomach content is porous.  Reference: Mjanger et al 2016. | - |
| No\_Prey | No. of prey items found in each stomach | - |
| Prey\_length\_cm | Length of prey, directly converted using prey weight/prey size information.  Reference: Mjanger et al 2016. | cm |
| Scientific\_Name |  | - |
| English\_Common\_Name |  | - |
| Prey\_Category | Please see Supplementary Material 1 for details | - |
| Latitude\_dd |  | Decimal degrees |
| Longitude\_dd |  | Decimal degrees |
| Number.of.stomachs |  | - |
| Pooled | Record contains data for more than one stomach, with all contents data pooled. | - |

References:

Mjanger, H., Hestenes, K., Svendsen, B.V., Senneset, H., and Fotland, Å. 2016. Håndbok for prøvetaking av fisk og krepsdyr. Versjon 4.0 (SPD). Pp 1-193. In Norwegian.