**Title:** Chu\_Tunnicliffe-2015\_GCB-Data. A Canadian Healthy Oceans Network Ecosystem Function Project, EF-13.

**File:** Chu\_Tunnicliffe(2015\_GCB)DATA.xlsx

**Data collection dates:** 2006-2013

**Data collection location:** Saanich Inlet, Vancouver Island, British Columbia, Canada

**Description**: Data are animal counts and environment data collected during remotely operated vehicle imagery surveys. Data was collected as part of a PhD thesis (Chu).

**Associated Publication:** Chu JWF, Tunnicliffe V (2015) Oxygen limitations on marine animal distributions and the collapse of epibenthic community structure during shoaling hypoxia. Global Change Biology 21(8), 2989-3004.

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**Data organization:** Each row entry equals a second of annotated video. Each column is a metadata variable, water column property, or species count.

***Column header information:***

|  |  |
| --- | --- |
| **Name** | **Description** |
| Dive | ROV dive number |
| Date | Date of rov dive |
| Time | UTC timestamp |
| latitude | Latitude in decimal degrees |
| longitude | Longitude in decimal degrees |
| northings | UTM coordinates in projection WGS\_1984\_UTM\_Zone\_10N |
| Eastings | UTM coordinates in projection WGS\_1984\_UTM\_Zone\_10N |
| ROV\_depth\_m | unit = m, Depth measured by ROV navigation  |
| Altimeter | unit = m above bottom, depth measured by ROV navigation |
| Fieldwidth\_m | unit = m, width of video field of view, calculated from scaling lasers  |
| Transectlength\_m | unit = m, length of traversed distance from previous timestamp |
| transectSUM\_m | unit = m, cumulative traversed distance since start of transect |
| Area\_m2 | unit = m2, area surveyed from video field of view  |
| CTDtime | UTC time stamp from ROV-mounted CTD+O2  |
| Conductivity | unit = S/m, conductivity measured from ROV-mounted CTD+O2  |
| Density\_kgm3 | unit = kg/m3,density measured from ROV-mounted CTD+O2  |
| CTDdepth\_m | unit = m, depth measureded from ROV-mounted CTD+O2  |
| O2\_mlL | unit = ml/L, oxygen measured from ROV-mounted CTD+O2  |
| O2\_mgL | unit=mg/L, oxygen measured from ROV-mounted CTD+O2  |
| O2\_sat | unit= % saturation, oxygen measured from ROV-mounted CTD+O2  |
| Salinity\_PSU | unit = PSU, salinity measured from ROV-mounted CTD+O2  |
| Temperature\_dC | unit= °C, temperature measured from ROV-mounted CTD+O2  |
| VIDEO | raw video file name associated with timestamp and animal counts |
| TIMEfile | time elapsed associated with raw video file from VIDEO |
| LokiTIME | UTC timestamp from rov ROPOS navigation |
| **Data generated from the video** |
| OnTransect | presence/absence, 1 = on transect line, 0 = off transect line |
| Bacteria | presence/absenceof *Beggiatoa* spp., 1 = visible in video, 0 = absent |
| Spongeball | presence/absence of *Suberites* sp., 1= present, 0 = absent |
| Spongefinger | presence/absence *Syringella* sp., 1= present, 0 = absent |
| Lyopsetta | counts of *Lyopsetta exilis* |
| Pollock | counts of *Theragra chalcogramma* |
| Prickleback | counts of *Plectobranchus evides* |
| Eelpout | counts of *Lycodopsis pacifica* |
| Snake prickleback | counts of *Lumpenus sagitta* |
| Poacher | counts of *Xeneretmus latifrons* |
| Hake | counts of *Merluccius productus* |
| Plainfinmidshipman | counts of *Porichthys notatus* |
| Engsole | counts of *Parophrys vetulus* |
| Shinerperch | counts of *Cymatogaster aggregate* |
| Ronquil | counts of *Lepidopsetta bilieneata* |
| Rocksole | counts of *Lepidopsetta bilieneata* |
| Sanddab | counts of *Citharichthys sp.* |
| Cabezon | counts of *Scorpaenichthys marmoratus* |
| Doversole | counts of *Microstomus pacificus* |
| Sculpin | counts of *unknown teleost* |
| Skate | counts of *Raja rhina* |
| Greenstripe | counts of *Sebastes elongates* |
| Dogfish | counts of *Squalus acanthias* |
| Combfish | counts of *Zaniolepis latipinnis* |
| Redrockfish | counts of *Sebastes sp.* |
| Munida | counts of *Munida quadrispina* |
| Pinkshrimp | counts of *Pandalus jordani* |
| Spotprawn | counts of *Pandalus platyceros* |
| Humpback | counts of *Pandalus hypsinotus* |
| Spitontocaris | counts of *Spirontocaris sp.(sica)* |
| Dungeness | counts of *Metacarcinus magister* |
| Tanner | counts of *Chionoectes bairdi* |
| Redrock | counts of *Cancer productus* |
| Decorator | counts of *Chorilia longipes* |
| Octopus | counts of *Octopus rubescens* |
| Tritonia | counts of *Tritonia sp.* |
| Squid | counts of *Loligo opalescens* |
| Pisaster | counts of *Pisaster brevispinus* |
| Evasterias | counts of *Evasterias troschelli* |
| Pycnopodia | counts of *Pycnopodia helianthoides* |
| Luidia | counts of *Luidia foliolata* |
| Orthosterias | counts of *Orthasterias koehleri* |
| Solaster | counts of *Solaster sp.* |
| Seawhip | counts of *Halipteris willemoesi* |
| Metridium | counts of *Metridium farcinem* |
| Crimson | counts of *Cribinopsis fernaldi* |
| Seapen | counts of *Ptilosarcus gurneyi* |
| seal | counts of *Phoca vitulina* |