Global_patterns_predictors_marine_biodiversity_individual_taxa

Metadata

Last updated
20th July 2011. Data & metadata version 1.0

About
This dataset contains the underlying data used to create Figure 1 from:

> Tittensor et al. (2010). *Global patterns and predictors of marine biodiversity across taxa*. Nature, 466: 1098-1101

and consists of gridded species richness for each taxon in ESRI GIS shapefiles. Grid cells are equal-area.

Use constraints
These data may not be used for commercial or revenue generating activities. The data are provided without warranty of any sort. While these data are made freely available, we cannot provide technical or GIS support for use of the data in analyses. Please carefully read the Methods section of the Tittensor et al. paper above to get full details on the data processing and cleaning. Use of these data constitutes your acceptance of the 'Terms and Conditions of use' document provided with these data, and the Dalhousie web-page terms of use at http://www.dal.ca/terms_of_use.html.

Spatial reference information
Projection: Unprojected
Projection parameters: Units - degrees
Datum: WGS_1984

Data Attributes

Field	Description
FID	Internal record ID
Shape	The shape type of the record
GRIDCODE	A code for the individual grid cell
X_COORD	The longitude of the cell mid-point
Y_COORD	The latitude of the cell mid-point
Coral	Derived coral species richness
Cetacean	Derived cetacean species richness
Pinniped	Derived pinniped species richness
Mangrove	Derived mangrove species richness

Seagrass	Derived seagrass species richness
Squid	Derived squid species richness
CoasFishCK	Derived coastal fish species richness (co-kriged)
NonOcShark	Derived non-oceanic shark species richness
NonSqCeph	Derived non-squid cephalopod species richness
TunaBllfsh	Derived tuna & billfish species richness
OceanShark	Derived oceanic shark species richness
Euphausiid	Derived euphausiid species richness
ForamCK	Derived foraminifera species richness (co-kriged)

Dataset citations

The citation for the dataset as a whole is:

Tittensor, D. P., Mora, C., Jetz, W., Lotze, H. K., Ricard, D., Vanden Berghe, E., & Worm, B. (2010). Global patterns and predictors of marine biodiversity across taxa. *Nature*, 466: 1098-1101.

All source data were compiled and processed following the methods listed therein. We furthermore suggest that if you are working with individual taxa (rather than cross-taxa) that you consider using the original data sources, as they tend to be of higher spatial resolution. We thank and acknowledge each of the individual data sources below for making this study possible, and ask that you please credit them appropriately:

Brinton, E. *et al*. (2000). Euphausiids of the world ocean CD-ROM. *ETI Bioinformatics*.

FAO. (1984). FAO Species Catalogue (eds Roper, C. F. E., Sweeney, M. J. & Nauen, C. E.). Vol. 3. *FAO*.

FAO. (2005). Cephalopods of the world: an annotated and illustrated catalogue of cephalopod species known to data (eds Jereb, P. & Roper, C. F. E.).Vol. 1. *FAO*.

Green, E. P. & Short, F. T. (2003). World Atlas of Seagrasses. *Univ*. *of California Press*.

IUCN (2010). IUCN Red List of Threatened Species. Version 2010.4 <*http://www.iucnredlist.org*>. Downloaded on 27 October 2010

Lucifora, L. O., Garcia, V. B. & Worm, B. (2011). Global diversity hotspots and conservation priorities for sharks. *PLoS One*, 6: e19356, 1-7.

Prell, W., Martin, A., Cullen, J. & Trend, M. (1999). The Brown University foraminiferal data base, IGBP PAGES/ World Data Center–A for Paleoclimatology data contribution series # 1999-027. *NOAA/NGDC Paleoclimatology program*.

Schipper, J. *et al*. (2008). The status of the world's land and marine mammals: diversity, threat, and knowledge. *Science*, 322, 225-230.

Spalding, M. D., Blasco, F. & Field, C. D. (1997). (eds) World Mangrove Atlas. *The International Society for Mangrove Ecosystems*.

UNEP-WCMC. (1997). Global distribution of mangroves (UNEP World Conservation Monitoring Centre/ISME) In *World Mangrove Atlas* (eds Spalding, M. D., Blasco, F. & Field, C. D.). *The International Society for Mangrove Ecosystems*.

UNEP-WCMC & Short, F. T. (2003). Global seagrass diversity (v1.0) in World Atlas of Seagrasses (Green, E. P. & Short, F. T.). *Univ. of California Press*.

UNEP-WCMC & Short, F. T. (2003). Global seagrass ranges (v1.0) in World Atlas of Seagrasses (Green, E. P. & Short, F. T.). *Univ. of California Press*.

UNEP-WCMC & Short, F. T. (2003/2005). Global distribution of seagrasses (v2.0) in World Atlas of Seagrasses (Green, E. P. & Short, F. T.). *Univ. of California Press*.

United Nations Food and Agriculture Organization (FAO) Atlas of Tuna and Billfish Statistics (*http://www.fao.org/fishery/statistics/tuna-atlas/4/en*)

Vanden Berghe, E. (editor) (2007). The Ocean Biogeographic Information System: web pages. Available on *http://www.iobis.org*.

Veron, J. E. N. (2000). *Corals of the world*, Vols 1-3. *Australian Institute of Marine Science*.

Worm, B. et al. (2005). Global patterns of predator diversity in the open oceans. *Science* 309: 1365-1369.

Point of contact

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