ReadMe File for PADDDtracker.org Data Release Version 2.1

Prepared by Conservation International, May 2021

Thank you for downloading the PADDDtracker.org Data Release Version 2.1. This dataset includes data on Protected Area Downgrading, Downsizing, and Degazettement (PADDD). Most data have been validated by peer-review, with the limited exception of newly added data from the United States and Brazil; see below for further details and links to publications.

Definitions for Protected Area Downgrading, Downsizing, and Degazettement (PADDD):

- Downgrading: A decrease in legal restrictions on the number, magnitude, or extent of human activities within a protected area by a relevant authority
- Downsizing: A decrease in the size of a protected area as a result of excision of land or sea area through a legal boundary change
- Degazettement: A loss of legal status of a protected area under government administration (national, state, provincial or local)

This data release contains data from the following peer-reviewed studies:

- M.B. Mascia, S. Pailler, Protected area downgrading, downsizing, and degazettement (PADDD) and its conservation implications. *Conservation Letters.* 4, 9–20 (2011). DOI: 10.1111/j.1755-263X.2010.00147.x.
- M.B. Mascia *et al.*, Protected area downgrading, downsizing, and degazettement (PADDD) in Africa, Asia, and Latin America and the Caribbean, 1900–2010. *Biological Conservation*. **169**, 355–361 (2014). DOI: 10.1016/j.biocon.2013.11.021.
- J.L. Forrest et al., Tropical deforestation and carbon emissions from protected area downgrading, downsizing, and degazettement (PADDD). Conservation Letters. 8, 153–161 (2015). DOI: 10.1111/conl.12144.
- S.M. Pack *et al.*, Protected area downgrading, downsizing, and degazettement (PADDD) in the Amazon, *Biological Conservation*, **197**, 32–39 (2016), DOI: 10.1016/i.biocon.2016.02.004.
- R.E. Golden Kroner, R. Krithivasan, M.B. Mascia, Effects of protected area downsizing on habitat fragmentation in Yosemite National Park (USA), 1864 - 2014. *Ecology and Society.* 21 (2016). DOI: 10.5751/ES-08679-210322.
- C.N. Cook, R.S. Valkan, M.B. Mascia, M.A. McGeoch, Quantifying the extent of protected-area downgrading, downsizing, and degazettement in Australia. *Conservation Biology.* 31, 1039–1052 (2017). DOI: 10.1111/cobi.12904.
- R.E. Golden Kroner *et al.*, The uncertain future of protected lands and waters. *Science.* **31**, 364 (6443), 881-886 (2019). DOI: 10.1126/science.aau5525.
- T. Dorji, S. Linke, F. Sheldon, Half century of protected area dynamism in the country of Gross National Happiness, Bhutan. *Conservation Science and Practice*. (2019). DOI: 10.1111/csp2.46.
- A. De Vos, H. Clements, D. Biggs, G.S. Cumming, The dynamics of proclaimed privately protected areas in South Africa over 83 years. *Conservation Letters*. 12 (6) (2019). DOI: 10.1111/conl.12644.
- R. Albrecht, C.N. Cook, O. Andrews, K.E. Roberts, M.F.J. Taylor, M.B. Mascia, R.E. Golden Kroner, Protected area downgrading, downsizing, and degazettement (PADDD) in marine protected areas. *Marine Policy*. 129 (2021). 104437, ISSN 0308-597X. DOI: 10.1016/j.marpol.2021.104437.

Please contact <u>paddd.team@gmail.com</u> to request full text versions of publications if not otherwise open access.

Please note that 353 (7% of) records in the database (new records from the United States and Brazil) have not yet been validated by peer review; see Olsson et al. 2021 for more information about these data:

• Olsson, E., Albrecht, R., & Golden Kroner, R.E. (2021). PADDDtracker Data Release Version 2.1: Technical Notes. Conservation International, Arlington, VA. DOI: 10.5281/zenodo.4749615.

Differences between Version 2.1 and previous data releases:

PADDDtracker data release Version 2.1 contains 21 new fields:

- Sys_Code
- Map_Details
- Map_Source
- Notes
- Last Update
- AddedBy
- isLatestVe
- Data_Status
- Peer Reviewed
- Study_Link
- Off_Type
- Off Area
- Off Details
- Off Source
- Rev_Type
- Rev_Area
- Rev_Details
- Rev_Source
- Legal_Type
- Marine
- Marine ZID

Two fields included in the previous data release have been archived; these are both out-of-date ID fields that are no longer necessary to retain.

- PADDDIDOId
- GID String

Version history

- Version 1.0 was released in January 2014, and contains 601 PADDD events from Africa, Asia, Latin America and the Caribbean, spanning from 1900 to 2012.
- Version 1.1 was released in January 2017, and contains a total of 721 PADDD events, including updated data from version 1.0 as well as additional PADDD events in the Democratic Republic of the Congo, Peru and Brazil, spanning from 1900 to 2016.

- Version 2.0 was released in May 2019, and contains a total of 4597 PADDD events, including updated PADDD events from previous data releases (1.0 and 1.1), and new records from around the world (Africa, Asia, Australia, Europe, Latin America and the Caribbean, North America).
- Version 2.1 contains a total of 4962 PADDD events, including updated data from version 2.0 as well
 as additional PADDD events in Australia, Brazil, Bhutan, Palau, South Africa, and the United States.
 It also includes several new fields for supporting details data, including for offsets and reversals.
 Please consult the Field Definitions PDF and/or Olsson et al. 2021 in the data release package for
 information on these new field names, field name definitions, data values, and clarifications.

In the folder PADDDtracker DataReleaseV2 1 2021, you will find:

- PADDDtracker_DataReleaseV2_1_2021.xlsx: this Excel file contains data on all known PADDD events, including numerical and categorical data. This includes data on location, dates, areas, IUCN categories, proximate causes and other descriptive attributes associated with PADDD events. The file contains the following tabs:
- ReadMe: introduction to dataset.
- FieldDefinitions: contains definitions for all fields (attributes) in the database.
- PADDDEvents: Dataset of known enacted and proposed PADDD events, including attributes
 describing location, timing, proximate causes, and associated supporting information and
 sources. The Supporting Details and References are omitted from the shapefile, as the text
 exceeds the character limit.
- PADDDReversals: information about location, dates, etc. on PADDD events with full or partial
 reversals for which spatial data are available. The Supporting Details and References are omitted
 from the shapefile, as the text exceeds the character limit.
- PADDDOffsets: information about location, dates, etc. on PADDD events with known spatial or regulatory offsets for which spatial data are available. The Supporting Details and References are omitted from the shapefile, as the text exceeds the character limit.
- PADDDMPAZones: information about location, dates, zone name(s), and other descriptive
 information on PADDD events in marine protected areas (MPAs) in cases where MPAs were split
 into two or more use zones (see FieldDefinitions tab for zone domain values). The Supporting
 Details and References are omitted from the shapefile, as the text exceeds the character limit.

Primary GIS Datasets

2. **PADDDtracker_DataReleaseV2_1_2021_Pts.shp:** This shapefile contains point data for all validated PADDD events corresponding with the accompanying Excel sheet.

Please note that for an event for which the exact location is unknown, it is represented by a point placed either at the PA centroid or within the PA extent if a multipart polygon (for downgrades or downsizes), or on the capital city of the country. If using PADDD events data for spatially explicit analyses for which locations of event areas are necessary, please use the field "Location_K" as a filter to remove events with unknown locations.

3. **PADDDtracker_DataReleaseV2_1_2021_Poly.shp:** This shapefile contains validated polygon data for PADDD events corresponding with the accompanying Excel sheet.

Supplemental GIS Datasets

- 4. **PADDDtracker_DataReleaseV2_1_2021_Pts_Reversals.shp:** Point shapefile of reversals to PADDD events.
- 5. **PADDDtracker_DataReleaseV2_1_2021_Poly_Reversals.shp:** Polygon shapefile of reversals to PADDD events.
- PADDDtracker_DataReleaseV2_1_2021_Poly_Offsets.shp: Polygon shapefile of offsets to PADDD events.

7. **PADDDtracker_DataReleaseV2_1_2021_Poly_MPAZones.shp:** Polygon shapefile of zoning changes that constitute PADDD events.

Additional Resources

- PADDDtracker Technical Guide V2, 2020: contains guidance for researchers to collect PADDD data.
- 9. **PADDDtracker Data Release 2.1 Technical Note, 2021:** provides more details on PADDD Reversals, PADDD Offsets, Marine Zoning, and data that have not yet been peer-reviewed.
- 10. **PADDD Annotated Bibliography V1.1, 2021:** contains citations and overviews of peer-reviewed papers that have contributed research or data for PADDD.

If you have any questions or comments about the dataset that are not answered in this ReadMe, PADDDtracker.org, or the Technical Guide, or would like to request earlier versions of the data, please contact paddd.team@gmail.com.

Please refer to Albrecht et al. 2021, De Vos et al. 2019, Dorji et al. 2019, Golden Kroner et al. 2019, Mascia et al. 2014, Forrest et al. 2015, and Pack et al. 2016, as well as the technical guide to PADDDtracker.org, for more detailed methods and notes. PADDD data from Malaysia, as published in Forrest et al. 2015, are available through request for purposes of replicating the original analyses.

How to Attribute:

Please use the following attribution when using or referencing this data:

Conservation International and World Wildlife Fund. 2021. PADDDtracker.org Data Release Version 2.1 (May 2021). Arlington, VA: Conservation International. Washington, DC: World Wildlife Fund. padddtracker.org. 10.5281/zenodo.4974336

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