bls8 FAIR table

FAIR principle	Definition	Application to biologging	Example
Findability	Data and metadata have a globally unique and persistent identifier (e.g., a digital object identifier, DOI) and are indexed in a searchable resource	Data repositories, like the Movebank Data Repository, improve data discoverability and may assign DOIs to data (avoiding issues with broken hyperlinks, for example)	A tracking dataset deposited in the Movebank Data Repository is findable by its permanent DOI or by searching the repository.
Accessibility	Data and metadata are retrievable by open and universal protocols, such as HTTP	Data repositories allow scientists to retrieve biologging data via a web browser or other open source tools	Publicly available data on Movebank may be downloaded via the website, API, or with the `move2` R package (Kranstauber, Safi, and Scharf 2023)
Interoperability	Data use formal and shared formats and vocabularies	Shared protocols like the Darwin Core standard (Wieczorek et al. 2012), Movebank data model (Animal Behavior, n.d.), and proposed bio-logging standardization framework (Sequeira et al. 2021) reduce barriers to combining datasets and increase uptake within and across scientific disciplines	Location and environmental data from seal-borne biologgers harmonized to a standard netCDF format facilitated their reuse by oceanographers to study polar regions (Treasure et al. 2017)
Reusability	Data and metadata are richly described and reuse permissions are clearly defined	Data repositories and standards together capture essential context for biologging data and provide licensing options for data reuse	The Movebank Data Repository releases datasets under the CC0 license and the Movebank data model (Animal Behavior, n.d.) includes fields important for data reuse, e.g., whether the animal was relocated before release.

Animal Behavior, Max Planck Institute of. n.d. "Movebank Attribute Dictionary." British Oceanographic Data Centre, Natural Environment Research Council Vocabulary Server. http://dx.doi.org/10.1038/s41597-019-0042-5.

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