

Making Parasite-Host Associations Visible using Global Biotic Interactions (GloBI)
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The Terrestrial Parasite Tracker (TPT) Network digitizes and aggregates arthropod parasite collections to build an easily accessible, comprehensive database of parasite-host associations and vector distributions. TPT is working to digitally provide information on parasite collections by providing research-ready data and images from 1.2+ million parasite specimens, which will be accessible to scientists, educators, wildlife managers, and policy makers worldwide.

Our network is providing needed baseline information for research and management of the ecological interactions among parasites, pathogens, and their hosts in North America (including the U.S. & territories) through Global Biotic Interactions (GloBI) data integration, and data review services. Global Biotic Interactions (GloBI) is an open data integration platform that continually indexes existing openly available species interaction datasets, literature, and specimen records using open source software. Since its inception in 2013, GloBI has grown to be the largest registry of biotic interaction claims, indexing over 8 million interaction claims sourced from hundreds of data sources and citing millions of references. For TPT, GloBI is used to keep track of availability of valuable evidence-based parasite-host interaction claims sourced from participating Natural History Collections as well as facilitating in-depth data reviews to help improve, and sometimes align, data exchange protocols (aka, integration profiles).

TPT has contributed 500,000 biotic interaction records to GloBI, which will organize, standardize and integrate our records into existing species interaction datasets accessible via web tools and machines. Here, we provide examples of various parasite specimens with label data, demonstrate how biotic association data will be captured in different platforms, and provide a standard glossary of association terms. Over the course of the project, TPT and GloBI will continue to work with data providers to discover biotic interactions in their collections and refine standards specific to their data sharing workflows.