BioTIME Bylaws

Status

Approved

Versions

V.2025. Current version.

This version was reviewed and approved by the BioTIME Leadership Council on 31 July 2025.

These Bylaws were inspired by and adapted from the Neotoma Bylaws V.2025.

1. Mission

The mission of the BioTIME Database (hereafter shortened to "BioTIME") is to provide a community-led, open access, curated database of biodiversity time series data to facilitate multi-scale, quantitative assessments of biodiversity change in the Anthropocene. BioTIME aims to provide resilient, long-term storage for assemblage time series datasets, covering any eukaryotic taxonomic group and from any ecosystem or realm. BioTIME data are made publicly available, within the constraints outlined by the BioTIME Data Use Policy. BioTIME aims to support research, knowledge transfer (education and outreach) and decision making (policy) on biodiversity change, while seeking to ensure Data Contributors' efforts are recognised and valued.

2. Core values

We, the BioTIME Community, believe that science is a public good and that data generated from scientific research should be made publicly available whenever possible. We are committed to advancing open, transparent, and ethical science by ensuring that our actions promote integrity in data usage and research. We believe that open practices outlined by the <u>FAIR data principles</u> and the <u>TRUST principles for digital repositories</u> foster research progress and maximise data usability by people and machines.

Diversity is intrinsically valuable to us, in ecology and in our human communities. We value responsible and ethical data stewardship that maximises benefit and minimises harm to ecosystems and peoples. We believe in ethical research in which science and justice are not in opposition, and in science that does not contribute to the marginalisation of any peoples or communities. We aim to follow the CARE principles to ensure Indigenous rights and wishes are respected. We aim to include Indigenous people in the stewardship and use of data collected within Indigenous land.

Our governance and collaborative practices reflect these values. We strive for diversity, equity and inclusivity, and seek to include individuals and voices from a diversity of identities, geographies, and career stages. We are building a community that recognizes and supports the

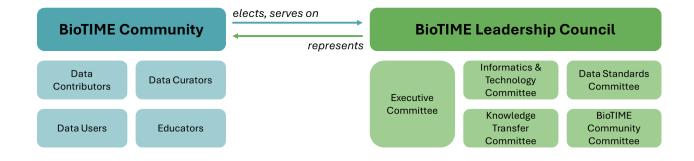
contributions of all participants, and upholds high standards of integrity in both data stewardship and human engagement.

3. Strategic goals

To fulfill our mission and embody our core values, BioTIME is committed to the following strategic goals:

- 1) **Expand BioTIME**: Increase the spatial and taxonomic coverage of the database by targeting underrepresented regions, ecosystems and taxa, and expanding engagement with new and diverse Data Contributors globally. Support long-term biodiversity monitoring and promote the resampling of historical sites to increase temporal coverage.
- Improve BioTIME: Enhance the quality and usability of data through ongoing improvements to curation workflows, taxonomic standardisation, metadata practices and adherence to evolving data standards.
- 3) **Build a resilient BioTIME**: Ensure the longevity of BioTIME through inclusive governance, strong institutional partnerships and diverse funding strategies that support BioTIME's long-term growth and stewardship.
- 4) Enhance use, impact, and capacity of BioTIME: Maximize the use of BioTIME data by supporting Data Users with accessible documentation, training resources and capacity-building initiatives. Strengthen global expertise by engaging and training researchers in the concepts and methods used to compile, process and synthesize biodiversity data. Catalyze scientific discovery and societal impact by facilitating the broad application of BioTIME in research, education and policy.
- 5) **Promote BioTIME and the BioTIME Community**: Raise awareness of BioTIME's mission, outputs and community through strategic communication, public engagement and advocacy for open biodiversity data.

4. Governance Structure



4.1 Leadership Council

The Leadership Council is the primary governing body for BioTIME. It is responsible for setting policy and soliciting and synthesizing input from the Membership, the Advisory Board and the broader scientific community. The Council holds the authority to establish strategic goals and propose modifications to the BioTIME Bylaws, Code of Conduct and Data Use Policy. The Leadership Council can authorise modifications to the BioTIME database and set priorities for informatics, fundraising, recruitment, and education and outreach initiatives. The Leadership Council facilitates communication among committees and with the Membership.

The Leadership Council is composed of 12 members elected from BioTIME's membership. The Council should reflect the diversity of career stages and expertise in the Membership. Terms last four years, begin on January 1, and are renewable. Half of the Council members are elected every two years. Nominees for the Council are recruited by the BioTIME Community Committee and are elected to the Council by the Membership in biennial elections. In addition to these elected positions, the Council may invite *ex officio* members (e.g. Principal Investigators on grants supporting BioTIME activities), Data Contributors, Data Curators, policy makers, educators or any other BioTIME Community Members to participate in Council discussions.

The Leadership Council currently oversees five standing committees: Executive Committee, Informatics and Technology Committee (ITC), Data Standards Committee (DSC), Knowledge Transfer Committee (KTC), and BioTIME Community Committee (BCC). Each of these committees is co-chaired by a minimum of two and a maximum of three members of the Leadership Council and may include non-Council members of the BioTIME Community. The Council may also establish other *ad hoc* committees as needed.

The Leadership Council meets at least twice per year, either in person or virtually. The Executive Committee is responsible for organizing and convening these meetings.

4.1.1 Executive Committee (EC)

The Executive Committee is responsible for the day-to-day operational management, coordination, and planning of BioTIME and its committees.

The EC consists of two to three co-chairs, and at least two other members, all selected from and by the Leadership Council. The Committee may also invite *ex officio* members or any other BioTIME Community Members to participate in EC discussions.

Key responsibilities of the EC include but are not limited to:

- Overseeing the hosting, development, and maintenance of BioTIME
- Defining BioTIME's structural framework (e.g., database variables, tables, metadata)
- Clarifying database field definitions and ensuring consistency in data standards
- Overseeing general management and planning across Committees
- Identifying priorities and organizing tasks aligned with strategic goals
- Monitoring task progress across Committees
- Coordinating project and file management platforms (e.g., Trello, Google Docs, Dropbox, GitHub)

- Managing GDPR compliance and liaising with legal advisors
- Searching and applying for funding opportunities
- Launching new versions of BioTIME
- Addressing misconduct and Code of Conduct violations (in collaboration with BCC)

4.1.2 Informatics & Technology Committee (ITC)

The Informatics & Technology Committee is responsible for executing and administering the BioTIME data model, database, and software services underlying BioTIME. The ITC ensures the BioTIME database is keeping pace with current technologies and best practices, managing the infrastructure in such a way as to ensure long-term sustainability and storage of the BioTIME database. The ITC also develops tools for uploading, discovering, and visualizing BioTIME data.

The ITC is led by two to three co-chairs, who are selected from and by the Leadership Council. The ITC consists of at least two other members of the broader BioTIME Community who are appointed by the ITC co-chairs, with right of review and approval by the Leadership Council. The ITC consults as necessary with other Committees (e.g., Data Standards Committee, Executive Committee) and members of the BioTIME Community on IT-related matters.

Key responsibilities of the ITC include but are not limited to:

- Maintaining and updating the BioTIMEr R package (including CRAN submissions)
- Designing, maintaining and updating the BioTIME website (PHP, HTML/CSS)
- Developing and maintaining Shiny apps
- Developing, maintaining and updating the StoryTIME WordPress site
- Pushing updates from the local database to the public (e.g., website, Zenodo)
- Ensuring server functionality in coordination with host institutions
- Managing server access and user file storage
- Managing server updates (e.g., R, Debian, hardware)

4.1.3 Data Standards Committee (DSC)

The Data Standards Committee oversees all data standard- and data curation-related matters. It ensures consistency and quality across new and existing datasets.

The Data Standards Committee is led by two to three co-chairs, who are selected from and by the Leadership Council. The DSC shall consist of at least two other members of the broader BioTIME Community who are appointed by the DSC co-chairs, with right of review and approval by the Leadership Council. Additional ad hoc members may be added to ensure regional representation.

Key responsibilities of the DSC include but are not limited to:

- Identifying and reaching out to potential new Data Contributors
- Managing data contribution form submissions
- Curating new datasets

- Communicating directly with individual Data Contributors during the curation process
- Reviewing and resolving complex curation cases and questions during the curation process
- Maintaining standard operating procedures (SOPs) for data curation
- Training Data Curators (in collaboration with KTC)
- Organizing data curation hackathons (in collaboration with KTC)
- Managing Data Curators and performing quality checks
- Checking, updating, and recurating existing datasets as needed (including raw data, citations, links, etc.)
- Performing taxonomic standardisation
- Addressing dataset and database issues and implementing data model changes (e.g., citation links, encoding problems, SAMPLE_DESC field)
- Ingesting curated studies to SQL on the server
- Managing database versioning
- Archiving and storing original data files, contribution forms, and curation scripts
- Providing guidance and input into discussions regarding BioTIME's data model and standards

4.1.4 Knowledge Transfer Committee (KTC)

The Knowledge Transfer Committee promotes the use and application of BioTIME across audiences and in diverse settings (including research, education, policy and public sectors). It leads communication and outreach efforts, develops training and engagement resources, and supports efforts to build new partnerships that expand BioTIME's reach and impact.

The KTC is led by two to three co-chairs, who are selected from and by the Leadership Council. Other members may be appointed by the KTC co-chairs from the broader BioTIME Community, with right of review and approval by the Leadership Council.

Key responsibilities of the KTC include but are not limited to:

- Planning and coordinating outreach, education and public relations strategies
- Presenting BioTIME at events and conferences
- Sourcing, editing, and publishing StoryTIME content
- Managing social media and public communications (e.g., YouTube, website, press releases)
- Developing and updating training materials for data curation training
- Training Data Curators (in collaboration with DSC)
- Organizing workshops and hackathons (in collaboration with DSC)
- Developing and teaching modules at host institutions

4.1.5 BioTIME Community Committee (BCC)

The BioTIME Community Committee manages communications and relations with the current network that constitutes the BioTIME Community as well as recruitment into the community. The BCC is in charge of developing slates of candidates for the Leadership Council, approving

membership requests, and running elections. Decisions to admit Members are reached via consensus or may be delegated by the committee to the BCC co-chairs. If a vote is called regarding a membership application, membership is approved by majority vote among the committee. Membership decisions by the BCC may be appealed to the Leadership Council.

The BCC is led by two to three co-chairs, who are selected from and by the Leadership Council. Other members may be appointed by the BCC co-chairs from the broader BioTIME Community, with right of review and approval by the Leadership Council.

Key responsibilities of the BCC include but are not limited to:

- Managing and approving membership requests
- Running elections for Leadership Council
- Developing, maintaining and updating the Member database
- Handling all email inquiries and collaboration requests
- Managing communication with Data Contributors post-curation
- Drafting and sending mass communications to BioTIME Community and BioTIME Consortium
- Addressing misconduct and Code of Conduct violations (in collaboration with EC)

4.2 Advisory Board

The Advisory Board is an external, non-governing body that serves in a consultative capacity to the BioTIME Leadership Council and broader governance structure. It provides strategic guidance to support BioTIME's sustainability, enhance its service to Data Users and Contributors, and fosters partnerships with aligned scientific and informatics communities. The Advisory Board may also commission external assessments of BioTIME systems and governance. The Advisory Board meets as needed, typically on an annual or biennial basis.

Advisory Board members serve for four years and may serve multiple terms. They are invited to by the Leadership Council, based on nominations proposed by the Executive Committee with input from the Leadership Council, other committees, and the broader BioTIME Community.

5. Individual Roles and Responsibilities

5.1 Members

Members of the BioTIME Community are professional researchers, policy makers, educators or others who use or contribute data and/or code to BioTIME, and who are interested in furthering BioTIME's mission.

Members elect the Leadership Council and are encouraged to actively promote BioTIME through citations, social media, presentations at conferences and workshops, personal communication within their networks and other public outreach.

Membership can be requested by any individual, with requests directed to and approved by the BioTIME Community Committee. All Data Contributors and PIs on grants supporting BioTIME activities are automatically invited to be Members, which they may accept or decline. Members may discontinue their membership at any time upon written request to the BCC.

All Members are expected to adhere to the Code of Conduct. The BCC has the authority to revoke membership in case of Code of Conduct violations, following a review process. Any complaints involving members of the BCC will be handled by the Executive Committee.

5.2 Data Curators

Data Curators are responsible for evaluating whether datasets meet BioTIME's inclusion criteria, curating data to align with the BioTIME data model and ensuring that curated data adhere to established curation procedures and standards.

Data Curators are typically PhD-level scientists, professionals, or graduate students with established expertise in the fields of ecology, macroecology, or related disciplines. All Curators must be trained in the BioTIME data model, concepts, and curation procedure.

Each Curator is responsible for curating one or more datasets. They must submit the original and curated data, along with curation scripts, to the Data Standards Committee for peer review before upload to the BioTIME database. All Curators are Members of the BioTIME Community.

5.3 Data Contributors

BioTIME follows a distributed scientific governance model, in which Data Contributors retain primary responsibility for the stewardship of their datasets. They are responsible for 1) ensuring the integrity of the (raw) data and metadata provided, 2) establishing the data licensing for their datasets and 3) reviewing and verifying the integrity of their data following the curation process. All Data Contributors are automatically invited to become Members, which they may accept or decline.

5.4 Principal Investigators

Principal Investigators (PIs) or co-PIs on any grants supporting BioTIME activities (e.g. database infrastructure, data mobilisation, education and outreach) are automatically invited to become Members, which they may accept or decline.

6. Amendments to BioTIME Bylaws

These bylaws can be amended by a two-stage process. First, proposed amendments must be publicly announced to the BioTIME Community, with a minimum two-week period for comment. After this, any changes must be approved by a supermajority (two-thirds) of the Leadership Council present at a meeting (following quorum rules), with the outcome of the vote reported to the entire BioTIME Community.

7. Voting Policy

Leadership Council decisions are reached by consensus or, when called for, a vote. A quorum consists of more than 50% of Council members. Votes, if called for, should follow Robert's Rules of Order, with a clearly stated motion, a seconding of the motion, a period for deliberation, and

then a vote. Votes may be taken verbally, by show of hands, or via confidential ballot. Unless otherwise specified in these bylaws, votes pass with a simple majority of the Leadership Council.

Votes by BioTIME Community Members are decided by a majority of votes cast by the specified deadline. In cases where there is no majority (e.g. in an election with three or more candidates), a plurality is sufficient.

All voting, by both Members and the Council, may occur in person or via a suitable electronic forum.