1. **ORGANIZATIONAL PURPOSE**
   1. The Tennessee Cave Survey (TCS) is an internal organization of the National Speleological Society (NSS) committed to the discovery, exploration, survey and mapping of the caves of Tennessee. Our organization systematically collects, organizes, maintains, and disseminates cave location information, cave narrative files, bibliographic data, and cave maps. The TCS relies exclusively on the volunteer participation of its caver members for all organizational data.
   2. TCS data is available to vetted members of the caving community. The TCS, along with its parent organization the NSS, strongly encourages and promotes the protection of the caves of Tennessee from significant adverse environmental impact. The TCS recognizes that this resource conservation should also be consistent with reasonable cave access for recreation, scientific study, exploration and survey by cavers in good standing.
2. **SCOPE**

This procedure applies to all activities, products, and services associated with the TCS.

1. **RESPONSIBILITY**
   1. The TCS Data Sharing Committee (hereafter called the Committee) are responsible for the development, implementation, approval, and adherence to this policy. The Committee is also responsible for reviewing requests for TCS data under the guidance of this policy.
   2. The Chair of the Committee is responsible for managing requests and approvals for data sharing and use falling under this policy.
2. **DEFINITIONS**
   1. Data: Information relating to a cave located in the state of Tennessee held within the TCS including but not limited to latitude/longitude locations, narrative descriptions, maps, images, digital files (points, polygons, geodatabases, etc.).
   2. Member: An individual that pays annual dues to the TCS and receives the data files in that given year or has access to any online TCS resources.
   3. Non-Member: Any potential user of the TCS data that does not pay dues, attend meetings, or contribute data but may wish to use the data for their personal or agency / organizational purposes.
   4. TCS Report Form: A blank form containing critical data elements needed to add a cave to the TCS database which can be populated by members or the non-members.
   5. TCS Data Request Form: A form to be completed by any member or non-member organization wishing to use the TCS data for purposes other than casual research or recreation.
   6. TCS Data Sharing Committee or ‘Committee’ within the confines of this policy: The Committee will be comprised of TCS officers and consist of no less than three members, two of which are self-nominated and the third who serves as chair and is elected by the TCS membership. The Committee Chair will be elected every other year by the general membership at the same time as the other officers and will be elected from the Executive Committee.
3. **REFERENCE DOCUMENTS**
   1. By-Laws of the Tennessee Cave Survey (as approved 10/20/18)
4. DATA TYPES
   1. Each year, the TCS will publish data in the fall in preparation for the annual Fall Business Meeting. Paying membership provides members with the opportunity to purchase access to TCS data (currently available in entirety in hard copy CD/DVD format, flash drive and cloud formats). Cost of membership and data purchase vary from time to time and are voted on and approved by TCS members.
   2. The data content is highly controlled by Officers of the TCS but is based on submissions from its membership and the general public. There is no public ‘wiki’ platform or online edit capability to modify the data.
   3. Data currently exists in physical form only (as of 2018) within databases, spreadsheets and spatial GIS files. The following file types currently exist and are covered by this policy:
      1. Narrative Files: Prose descriptions and specific data points such as geological strata, entrance description, latitude and longitude, elevation, vertical and horizontal length, etc. Data is based on submissions of official TCS Report Forms for a single cave.
      2. Digital Files & Data: Geospatial location data consisting of points and metadata in shapefiles which can be used to create maps, buffer areas, polygons, point clouds, etc.
      3. Maps: Actual line plots and drawn up maps of known TCS caves used to navigate inside a cave. Where mapmakers have specified permission for use must be granted, access must be approved by the mapmaker.
      4. Bibliography: Parts of or the entire bibliography of the TCS which includes reference to the data and its elements.
      5. Other Data: A variety of cave related research files, including but not limited to, data and points, e.g. landforms, speleobiological data, images, history and archeological research articles.
5. DATA USE  
   1. TCS data is a resource for our members, but can also be used by partners to advance the mission of the TCS. Our Data is meant to be used in order to manage, preserve, locate, explore, and research caves and cave resources. Locations of these underground resources are constantly being threatened. It is a primary goal of the TCS to ensure that all use of our data advances cave protection and research so that members will feel confident when contributing locations.
   2. TCS data may at no time be used for purposes that adversely impact caves or the private landowners who own title to cave entrances. The TCS Data Sharing Committee will determine if uses contradict our organizational purpose.
   3. TCS data is currently not used for profit making purposes other than to support creation of data set for members and operating costs. Data is not created and managed with the intent to sell the information to outside parties for uses outside our organizational mission.
   4. TCS data contains point locations on private land and many landowners do not want to publicize these locations or allow access to their cave entrances for a variety of reasons. Access to any cave described by the TCS cave is solely at the discretion of the landowner of that cave. The TCS data, including location data, however, is not owned by private landowners but is under the stewardship of the TCS where we have documented that information in our survey. The TCS paying members, officers and TCS Data Committee control all permitted use of the data.
   5. Permitted Use by Members who are working with, are members of, or act on behalf of a Third Party: Working with a third party is allowed, but one must remain in compliance with 7.6, and 8.0.
   6. Permitted Use by Non-Members: Sharing of the data and use by third party organizations outside of TCS membership is set forth in Section 8.0 and governed by the TCS Data Committee. From time to time the TCS Data Sharing Committee may determine that certain data uses are permissible including but not limited to the following uses:
      1. Protection of cave locations and resources from development, destruction, and abuse.
      2. Protection of cave related resources whether geological, biological, historical, archeological, or hydrological.
      3. Protection of troglomorphic species regardless of globally rare, federally lists or state imperiled status.
      4. Creation of land protection and conservation projects, wildlife corridors, and habitat protection areas.
      5. Publication of research which requires or references the TCS data set.
      6. Projects resulting in publicly viewable products with TCS data represented or requiring reports with TCS data to public entities (Publicly viewable includes even small groups of non-members), for instance, the development of forest management plans, visual maps, etc.
      7. Location of missing persons, emergency situations, and/or search and rescue operations as outlined in 9.4.
6. DATA SHARING  
   1. Requests must be submitted using the TCS Data Request Form which will include the requestor details, specific intended use of the data, formats needed, areas required, names and titles of all users, term limits on data use, any for profit intent, estimated profit if used for profit intent, etc. The Committee reserves the right to modify, narrow or constrain the use request but still allow sharing of the data.
   2. The Committee may reserve the right to determine which portions of the data - in total, part or obfuscated - may be approved for use by third parties. For instance, the Committee may exclude individual point data and latitudinal and longitudinal locations for a specific cave if the cave is known to be on private land or is home to species in need of protection (e.g. crayfish, bats). Less generalized location data could be represented as jittered points, buffered points, or generalized location information may be substituted instead.
   3. Provision of maps to any party will adhere to permission granted by the mapmaker or copyright owner of the map in accordance with guidance provided on the map itself.
   4. Data can be shared with external parties either at cost or free of charge in certain formats only.
   5. In certain instances, if the mission of the TCS is met by the requestor’s need and they will receive profit from the use of the data, a portion of the anticipated proceeds from data use must be shared with the TCS. The amount of payment required will be based upon the expected profit and be determined beforehand with the requestor before the request is granted.
   6. Requestors which become data recipients may not use the data for any purposes other than that stated on their Request Form and cannot share the data with any party or individual not specifically approved by the Committee.
   7. Data use term must be defined by the requestor and approved by the Committee.
7. APPROVAL PROCEDURE
   1. All large requests, or requests from commercial, government entities or other groups should be formally submitted to the TCS Data Sharing Committee, which is composed members as defined in Section 4.6.
   2. Data requests can be submitted by any TCS member (non-officer) on behalf of a requestor, but should be immediately directed to a TCS officer. If a member is approached for data sharing, they should forward all requests directly to the Committee. TCS members do not have the authority to approve data requests.
   3. All requests must be vetted by the entire Committee before a vote to approve is taken. The Committee will vote to approve or reject all requests for data sharing and use, where a majority of committee members must vote in favor for the request to be approved. Committee votes must be submitted verbally, in person during meetings or in writing to the Committee Chair. To promote transparency, all data requests must be presented to the TCS membership as part of the agenda during the Spring and Fall TCS Business Meetings.
   4. In the case of extreme events, emergencies or law enforcement related investigations, TCS data including maps and location data may be shared if single officer of the TCS verbally approve the request for data.
8. APPROVALS

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| --- | --- | --- |
| Name/ Title | Signature | Date |
| Kristen Bobo, Narrative Files Director | *Kristen Bobo* | 4/19/21 |
| Zeke McKee, Map Book Director | *Zeke McKee* | 4/19/21 |
| Ben Miller, Bibliography Files Director | *Ben Miller* | 4/19/21 |
| Emily Davis, Director at Large West Tennessee | *Emily P Davis* | 4/19/21 |
| Chris Kerr, Director at Large East Tennessee | *Chris Kerr* | 4/19/21 |
| JP McLendon, Co-chair East | *JP McLendon* | 4/19/21 |
| Gerald Moni, Co-chair West | *Gerald Moni* | 4/19/21 |
| Chuck Sutherland, Meeting Director | *Chuck Sutherland* | 4/19/21 |
| Effective Date | \*\*\*\*\*\*\*\*\*\* | 07 April 2021 |

1. **REVISION HISTORY**

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| --- | --- | --- | --- |
| **Rev** | **Date** | **Responsible Person** | **Description of Change** |
| 00 | 10/24/18 | Chair of TCS Data Sharing Procedure Committee, Emily Davis | Original issue |
| 01 | 11/02/18 | Cory Holliday, Emily Davis, Chuck Sutherland | Formatting, grammar, intent. |
| 02 | 04/06/21 | Executive Committee (Kristen Bobo, Gerald Moni, Chuck Sutherland, Kyle Lassiter, Zeke McKee, Emily Davis, Ben Miller) | Changes to provisions around data types, stewardship of data, clarification of third party association, Data Committee structure |
| 03 | 04/19/21 | Emily Davis | Added term limit for the Committee Chair |

For Reference Only - Excerpt from TCS Bylaws: Permitted Use by Members: TCS members may freely use the TCS data for casual, unpublished research and recreation. Membership Requirements are laid out in the By-laws of the Tennessee Cave Survey Requests come to the TCS from individuals, government agencies, law enforcement, groups, for-profit companies, non-profit organizations. TCS data in any form digital or printed may not be shared with non-members. Data can be printed by members for regular or one time use, but should not be distributed to non-members.