**Table 1.** Description du jeu de données/ Description of dataset

|  |  |
| --- | --- |
| **Titre du jeu de données/ Title of dataset** | Vegetation data of the permanent plots of Lac Croche, Québec, Canada (1998-) |
| **Identifiant du jeu de données/ Dataset identifier** | (DOI of Zenodo)  DOI du papier |
| **Résumé/ Abstract** | Here we provided a dataset of vegetation sampling of the permanent forest plots of Lac Croche that began in 1998. The goal was to conduct a detailed sampling of the dominant vegetation and understory of a North American temperate forest located at the Station de Biologie des Laurentides, Québec, Canada.  The sampling plan is based on an annual visit of 43 permanent 400 m2 plots along five transects parallel to an altitude gradient from a lake (Lac Croche) to the top of a hill. Sampling is realized by undergraduate students during an plant ecology field course (BIO3753) of the Université de Montréal  Part of the data was already published in Paquette, A., Laliberté, E., Bouchard, A., de Blois, S., Legendre, P., & Brisson, J. (2007). Lac Croche understory vegetation data set (1998–2006) Ecological Archives E088‐197. Ecology, 88(12), 3209-3209. |
| **Mots-clés/ Keywords** | Forest, time series, biodiversity, maple, birch, vegetation succession |
| **Auteur principal du jeu de données/ Dataset lead author** | Alexis Carteron |
| **Position de l’auteur des données/ Position of data author** | Lecturer (BIO3753, 2019) |
| **Adresse de l’auteur des données/ Address of data author** | Université de Montréal, Département des sciences biologiques |
| **Courriel de l’auteur des données/ Email address of data author** | alexis.carteron@umontreal.ca |
| **Contributeurs de données/ Data contributors** | - Students of BIO3753  - Former and actual professors and lecturers (Non-exhaustive list: Alain Paquette, Etienne Laliberté, André Bouchard, Sylvie de Blois, Pierre Legendre, Jacques Brisson, Alexandre Bergeron, Xavier Guilbeaut-Mayers) |
| **Identifiant ORCID** | https://orcid.org/0000-0003-4162-9254 |
| **ORCID (all authors; seperate line)** | https://orcid.org/0000-0002-3167-2622 |
| **Personne contact/ Primary contact person for dataset** | Étienne Laliberté |
| **Position de la personne contact/ Position of primary contact person** | Professor (BIO3753) |
| **Adresse de la personne contact/ Address of primary contact person** | Université de Montréal, Département des sciences biologiques |
| **Courriel de la personne contact/ Email address of primary contact person** | etienne.laliberte@umontreal.ca |
| **Organisations associées aux données/ Organization associated with the data** | Université de Montréal, Département des sciences biologiques |
| **Droits d’utilisation/ Usage Rights** | CC BY 4.0 |
| **Region geographique/ Geographic region** | Laurentian region of Quebec |
| **Couverture geographique/ Geographic coverage** | Lat 45.9937  Long -74.0011 |
| **Lat, Long Nord-Ouest/ Northwest** |  |
| **Lat, Long Sud-Est/ Southeast** |  |
| **Couverture temporelle, début/ Temporal coverage - Begin date** | 1998 |
| **Couverture temporelle, fin/ Temporal coverage - End date** | 2018 (ongoing) |
| **Design d’échantillonnage/ General study design** | Five permanent transects were established in 1998 at the north-eastern tip of Lac Croche. Transects are separated by about 50 m. The transects, which run more or less parallel to each other at an azimuth of 074º, start at the edge of the lake and follow an elevation gradient uphill. Along the transects, 43 permanent plots were established (1998) approximately every 50 m. Their location is marked by permanent steel rods in their center. Plots are 20 × 20 m (400 m2). Sampling of the Lac Croche transects takes approximately three days and was done in August/Sptember  Within each plot the following parameters were assessed every year: (i) tree DBH (for trees < 10 cm DBH), (ii) tree sapling count (2 classes, between 1 and 5 cm and between 5 and 10 cm), (iii) tree seedlings count (DBH < 1 cm) within two classes according to height (smaller or taller than 30 cm) using ten 1 m x 1 m sub-plots that were established every 2 m along the center of each plot, following the transect axis (within each sub-plot, all tree seedlings were counted and identified to species, (iv) cover of herbaceous and shrub species using a modified Braun-Blanquet semi-quantitative cover scale (Barbour et al. 1999),  Protocol in French can be found here: <https://www.protocols.io/view/echantillonnage-des-parcelles-forestieres-permanen-36sgree> |
| **Ampleur de l’étude/ Study extent** | 43 permanent plot of 400 m2 (20 m x 20 m) sampled every year |
| **Description de l’approche/ Methods description** | Comparative community study |
| **Méthodes de laboratoire, de terrain, ou autre/ Laboratory, field, or other analytical methods** | Protocol in French can be found here: <https://www.protocols.io/view/echantillonnage-des-parcelles-forestieres-permanen-36sgree> |
| **Contrôle de qualité/ Quality control** | Data has been recorded by undergraduate students during plant ecology field course while supervised by lecturer or teaching assistants.  Seedling data are of uncertain quality at the species level. |
| **Information additionnelle/ Additional information** | Environmental data and its metadata can be found here: <http://esapubs.org/archive/ecol/E088/197/Croche_Env.txt> Part of the data can be found <http://esapubs.org/archive/ecol/E088/197/default.htm> |

**Table 2.** Description des variables dans les jeux de données/ Description of the variables (i.e., columns) in dataset 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Nom de la variable dans le jeu de données/ Attributes Name** | **Nom standard de la variable/ Attribute Label** | **Definition** | **Unités/Units** |
| station | Station | Code for the permanent plot | *N/A* |
| codeTaxa | Code for taxa | Taxa code of the species |  |
| cover | plant cover | Class of cover |  |
| count | plant count | The number of individuals |  |
| dhp | Diameter at breast height | Diameter at breast height (1.3 m) | cm |