



BNZ Core Data - Annual Seed Counts

- Started by John Zasada in the Bonanza Creek watershed -
- First site in 1957 (UP1A)
- Others started in 1969 (UP3A), ~1986 (FP2A, etc.)
- Added upland black spruce in 2008 (UP4A) & post-fire monitoring in CPRW
- Reduced to just 7 sites in 2018

Responsibilities & Opportunities

Within BNZ

- Work with site management team to periodically re-evaluate sampling plan (grant cycle)
- Ensure annual measurements are collected and processed
- Periodic QA/QC of data
- Recognize, communicate, advocate

Outside BNZ

- Contact person for questions about dataset (inside and outside BNZ)
- Opportunities for data analysis & primary publication
- Requests for collaboration as co-author on synthesis work

Recent Publications with BNZ Seed Data

Oecologia (2014) 174:665–677
DOI 10.1007/s00442-013-2821-6

PHYSIOLOGICAL ECOLOGY - ORIGINAL RESEARCH

Climate sensitivity of reproduction in a mast-seeding boreal conifer across its distributional range from lowland to treeline forests

Carl A. Roland · Joshua H. Schmidt · Jill F. Johnstone

Journal of Ecology



RESEARCH ARTICLE

Climate teleconnections synchronize *Picea glauca* mast seeding and fire disturbance: Evidence for a fire-related form of environmental prediction

Davide Ascoli , Andrew Hacket-Pain, Jalene M. LaMontagne, Adrián Cardil, Marco Conedera, Janet Maringer, Renzo Motta, Ian S. Pearse, Giorgio Vacchiano,

First published: 12 October 2019 | <https://doi-org.cyber.usask.ca/10.1111/1365-2745.13308> | Citations: 10

LETTER

doi:10.1038/nature24038

Temporal coexistence mechanisms contribute to the latitudinal gradient in forest diversity

Jacob Usinowicz¹, Chia-Hao Chang-Yang², Yu-Yun Chen², James S. Clark³, Christine Fletcher⁴, Nancy C. Garwood⁵, Zhanqing Hao⁶, Jill Johnstone⁷, Yiching Lin⁸, Margaret R. Metz⁹, Takashi Masaki¹⁰, Tohru Nakashizuka^{11,12}, I-Fang Sun², Renato Valencia¹³, Yunyun Wang⁶, Jess K. Zimmerman¹⁴, Anthony R. Ives¹ & S. Joseph Wright^{14,15}



ARTICLE

<https://doi.org/10.1038/s41467-020-20836-3>

OPEN



Continent-wide tree fecundity driven by indirect climate effects

James S. Clark ^{1,2✉}, Robert Andrus³, Melaine Aubry-Kientz⁴, Yves Bergeron ⁵, Michal Bogdziewicz ⁶, Don C. Bragg⁷, Dale Brockway⁸, Natalie L. Cleavitt⁹, Susan Cohen¹⁰, Benoit Courbaud², Robert Daley¹¹, Adrian J. Das ¹², Michael Dietze¹³, Timothy J. Fahey⁸, Istem Fer¹⁴, Jerry F. Franklin¹⁵, Catherine A. Gehring¹⁶, Gregory S. Gilbert ¹⁷, Cathryn H. Greenberg¹⁸, Qinfeng Guo ¹⁹, Janneke HilleRisLambers²⁰, Ines Ibanez ²¹, Jill Johnstone²², Christopher L. Kilner ¹, Johannes Knops²³, Walter D. Koenig ²⁴, Georges Kunstler²,



BNZ Seeds - Reflections on Core Data

- Great scientific value
- Connect BNZ to other sites worldwide
- High latitude location = important contribution
- Collaborate with exceptional researchers
- Regional to global scale inference