

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 CPCRW
- 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 coauthor 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* masting 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

Check for updates

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}



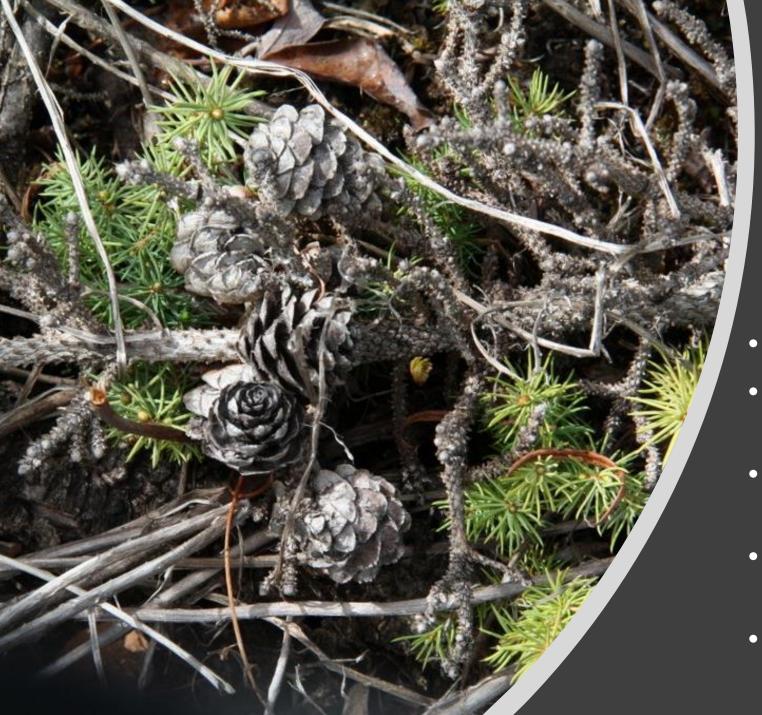
ARTICLE



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

Continent-wide tree fecundity driven by indirect climate effects

James S. Clark 1,2 A Robert Andrus A Melaine Aubry-Kientz Y Yves Bergeron 5, Michal Bogdziewicz 6, Don C. Bragg Dale Brockway Natalie L. Cleavitt Susan Cohen Benoit Courbaud Robert Daley Adrian J. Das 12, Michael Dietze Timothy J. Fahey Susan Cohen Fer James Fer Franklin Catherine A. Gehring Gregory S. Gilbert 17, Cathryn H. Greenberg Guo 19, Janneke Hille Ris Lambers In Inc. Lillones L. Kilner 1, Johannes Knops Walter D. Koenig 24, Georges Kunstler J. Johannes Knops Nather D. Koenig 24, Georges Kunstler 1, Johannes Knops Nather D. Koenig 24, Georges Kunstler Nather 1, Johannes Knops Nather D. Koenig 24, Georges Kunstler 1, Johannes Knops Nather D. Koenig 24, Georges Kunstler 1, Johannes Knops Nather D. Koenig 24, Georges Kunstler 1, Johannes Knops Nather D. Koenig 24, Georges Kunstler 1, Johannes Knops Nather D. Koenig 24, Georges Kunstler 1, Johannes Knops Nather D. Koenig 24, Georges Kunstler 2, Johannes Knops Nather D. Koenig 24, Georges Kunstler 2, Johannes Knops Nather D. Koenig 24, Georges Kunstler 2, Johannes Knops Nather D. Koenig 24, Georges Kunstler 2, Johannes Knops Nather D. Koenig 3, Johannes Knops Nather D. K



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