



**Mount Allison
Dendrochronology Lab**

Karen Harper Kejimkujik Transect Tree-ring Measurements

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Abstract

In the spring of 2012 Karen Harper asked the MAD Lab to make tree-ring measurements of samples taken from Kejimikujik National Park in 2011. In the end, the MAD Lab created five Excel files: harperk_OGA.xlsx, OGB.xlsx, OGC.xlsx, OGK1.xlsx, and OGK2.xlsx. These files contain annual tree-ring measurements for each of the samples provided for the study.

Introduction

In the spring of 2012 Karen Harper asked the Mount Allison Dendrochronology Laboratory (MAD Lab) to make tree-ring measurements for samples taken from Kejimikujik National Park, Nova Scotia. The measurements were for an ongoing research project within the National Park.

Methods

The MAD Lab received the cores and began to glue them on slotted mounting boards. The samples were sanded with increasingly finer sandpaper: 60, 80, 120, 220, 320, and 400 grit. The samples were then measured with a Velmex staging system with a 63X microscope to an accuracy of ± 0.001 mm. The measurements were individually placed in an excel files, totaling five, for further study.

Each sample was labeled according to its site, transect, and location on transect (e.g., the core was labeled GK1 1A 060, on the mounting board it was labeled OGK1-1A 60m, and the sample identification on the excel file is GK11A060).

Results

Results were placed in excel files, one for each transect:

- Harperk_OGA.xlsx
- OGB.xlsx
- OGC.xlsx
- OGK1.xlsx
- OGK2.xlsx

Notes

GA1A015 – NO BARK
GA1B000 – NO BARK
GA1B060 – NO BARK
GA1B060B – NO BARK
GA2A000 – NO BARK
GA2B005 – BARK DETACHED
GA2B040 – ROTTEN AT BEGINNING
GB1B000 – NO BARK
GB1B005B – NO BARK
GB1B015 – UNMEASURABLE
GB2A050 – MISSING SECTION AT BEGINNING
GC1C005B – NO BARK
GC2A040 – SECTION MISSING AT BEGINNING?
GC2B000 – NOT FULL CORE – ROT
GK1A15 – CORE MISSING FROM STRAW
GK1B005 – NO BARK

GK2A200 – UNMEASURABLE
GK12B150 – ROTTEN
GK21AREF2 – MISSING BARK
GK21A60B – SECTION MISSING
GK21B REF 1 – UNMEASURABLE
GK22A060 – MISSING BARK

Species

HEM – Hemlock
RPI – Red pine
PIN – Pine
EH – Eastern Hemlock
WPI – White pine
BSP – Black spruce
HEM - Hemlock